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L138        292 SEA ABB=ON  PLU=ON  "CHUNG SUNG"/AU OR "CHUNG SUNG KEE"/AU OR
                CHUNG S/AU OR CHUNG S K?/AU
L139          5 SEA ABB=ON  PLU=ON  "JEON O Y"/AU OR ("JEON OCK YOUM"/AU OR
                "JEON OCK YOUNM"/AU)
L140       1574 SEA ABB=ON  PLU=ON  KUMAR K/AU OR KUMAR K ?/AU
L141        540 SEA ABB=ON  PLU=ON  "YU SEOK"/AU OR "YU SEOK HO"/AU OR YU S/AU
                OR YU S H?/AU
L142         16 SEA ABB=ON  PLU=ON  L138 AND (L139 OR L140 OR L141)
L143          2 SEA ABB=ON  PLU=ON  L139 AND (L140 OR L141)
L144          0 SEA ABB=ON  PLU=ON  L140 AND L141

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     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
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     STRUCTURE FILE UPDATES:   22 NOV 2007  HIGHEST RN 955628-80-5
     DICTIONARY FILE UPDATES:  22 NOV 2007  HIGHEST RN 955628-80-5

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007
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Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE HCAPLUS

FILE COVERS 1907 - 23 Nov 2007 VOL 147 ISS 23
FILE LAST UPDATED: 22 Nov 2007 (20071122/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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FILE 'HCAPLUS' ENTERED AT 15:31:41 ON 23 NOV 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 23 Nov 2007 VOL 147 ISS 23
FILE LAST UPDATED: 22 Nov 2007 (20071122/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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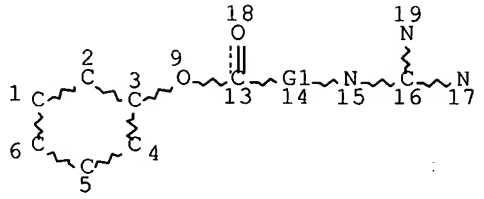

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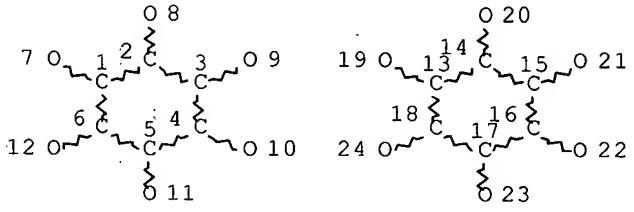

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POST PRIORITY & FILING

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L137 ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         2007:107441  HCAPLUS  Full-text
DOCUMENT NUMBER:          146:359080
TITLE:                    Design, synthesis, and delivery properties of novel
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guanidine-containing molecular transporters built on dimeric inositol scaffolds

AUTHOR(S): Maiti, Kaustabh K.; Jeon, Ock-Youm; Lee, Woo Sirl; Chung, Sung-Kee

CORPORATE SOURCE: Department of Chemistry, Division of Molecular and Life Sciences, Pohang University of Science & Technology, Pohang, 790-784, S. Korea

SOURCE: Chemistry--A European Journal (2007), 13(3), 762-775
CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have developed a novel class of synthetic mol. transporters that contain eight residues of guanidine with an inositol dimer as the scaffold. The dimers were prepared by connecting two units of myo- or scyllo-inositol via a carbonate or amide linkage, and the multiple units of the guanidine functionality were constructed on the inositol scaffold by means of per-acylation with ω-aminocarboxylate derivs. of varying length. Bioassays based on confocal laser scanning microscopy and fluorescence-activated cell sorter analyses indicated that these transporters display a varying degree of membrane translocating ability, and the intracellular localization and mouse-tissue distribution studies strongly suggested that these transporters undergo substantially different mechanistic processes from those of peptide transporters reported to date. It was also shown that doxorubicin, an anticancer antibiotic, can be efficiently delivered into mouse brain by aid of this type of transporter.

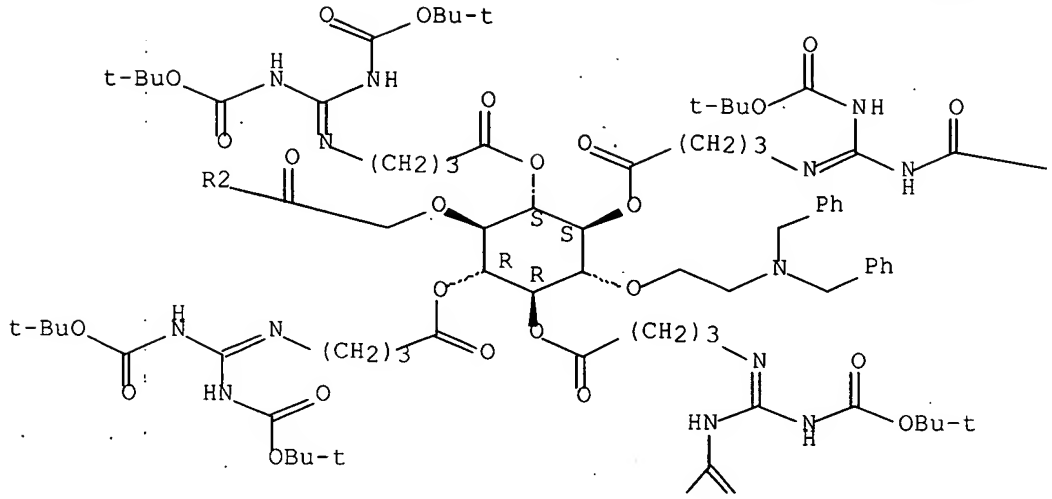
IT **898815-49-1P 898815-54-8P 898815-81-1P**
929623-34-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(design, synthesis, and delivery properties of novel guanidine-containing mol. transporters built on dimeric inositol scaffolds)

RN 898815-49-1 HCAPLUS

CN scyllo-Inositol, 1-O-[2-[bis(phenylmethyl)amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-1-oxobutyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-oxoethyl]-, 2,3,5,6-tetrakis[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]butanoate] (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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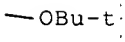

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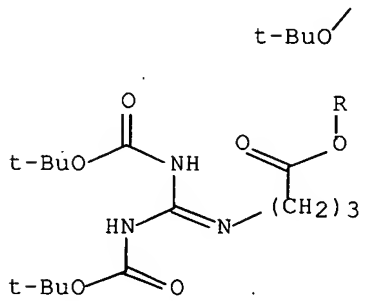

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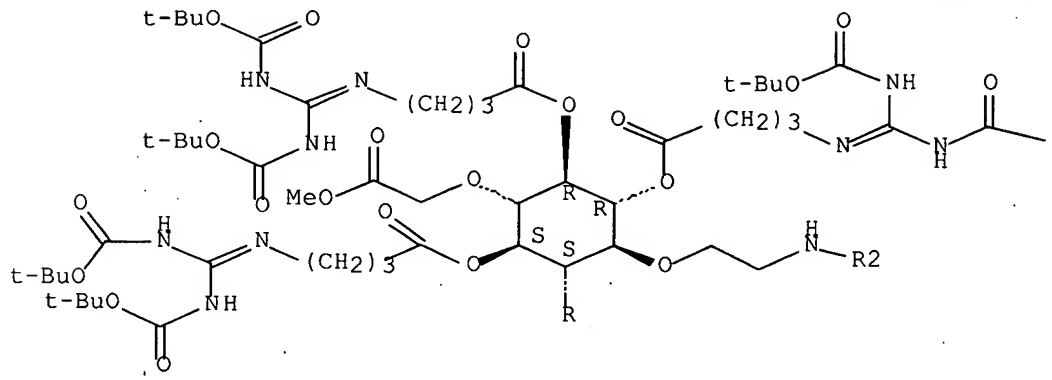

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—OBu-t

RN 898815-54-8 HCAPLUS
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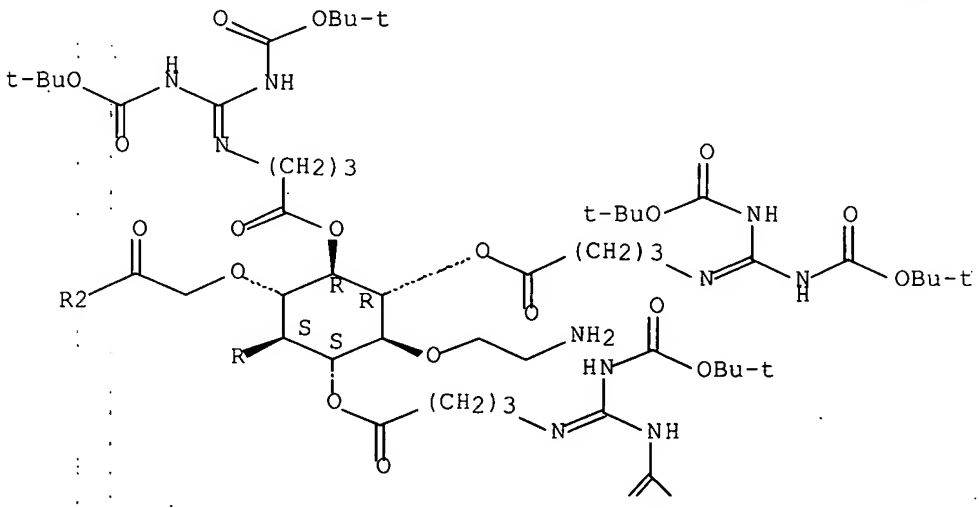
Relative stereochemistry.

PAGE 1-A



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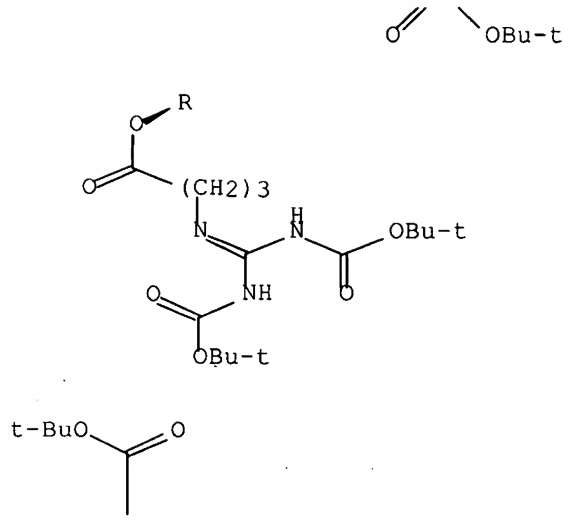

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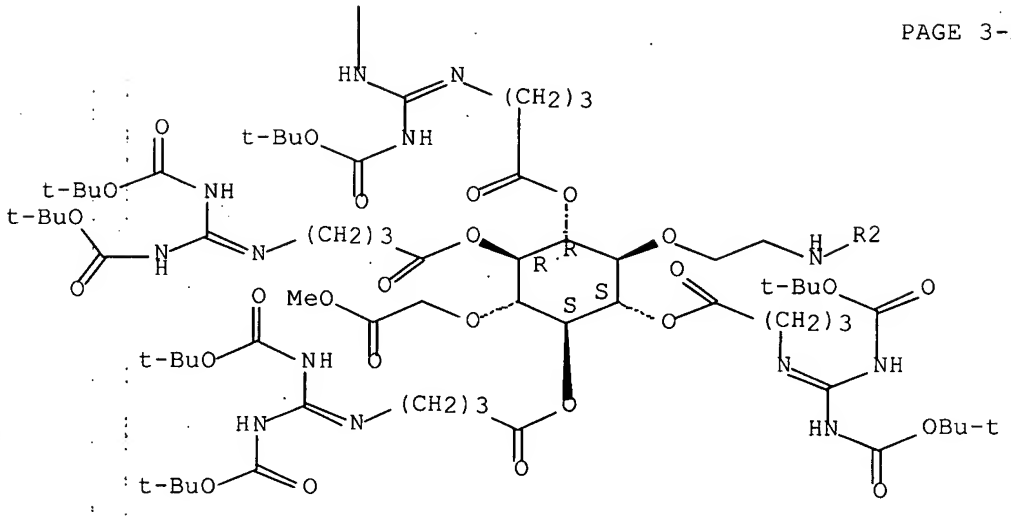
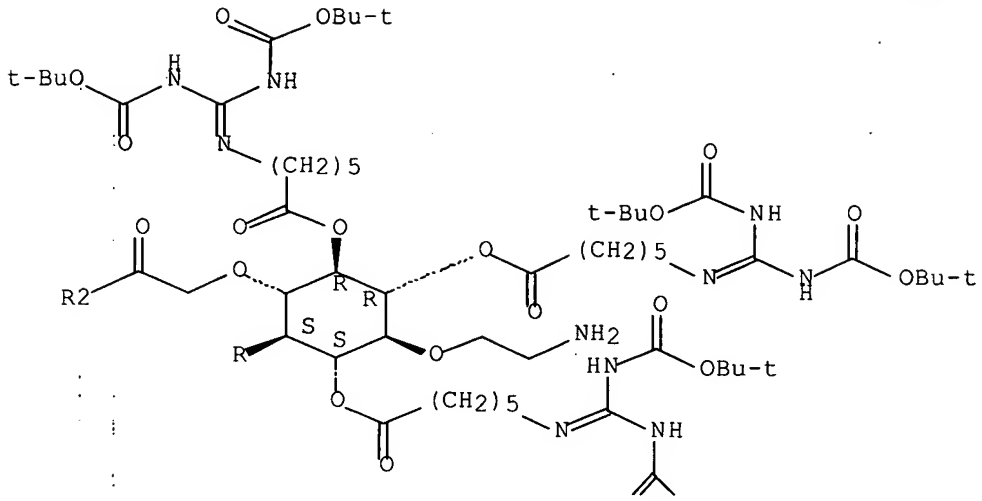


RN 898815-81-1 HCAPLUS

CN scyllo-Inositol, 1-O-[2-[[[4-O-(2-aminoethyl)-2,3,5,6-tetrakis-O-[6-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-1-oxohexyl]-scyllo-inositol-1-O-yl]acetyl]amino]ethyl]-4-O-(2-methoxy-2-oxoethyl)-, 2,3,5,6-tetrakis[6-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]hexanoate] (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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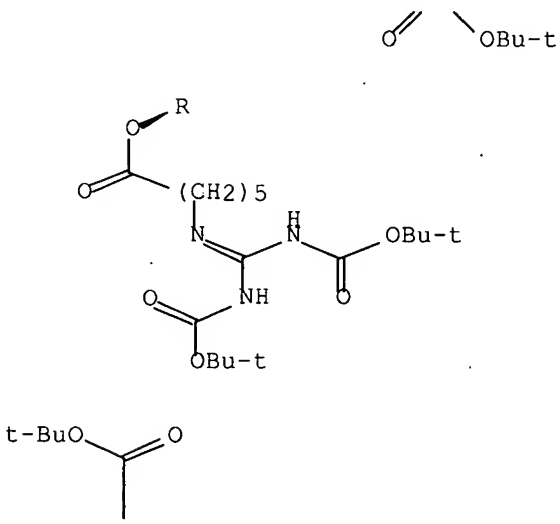

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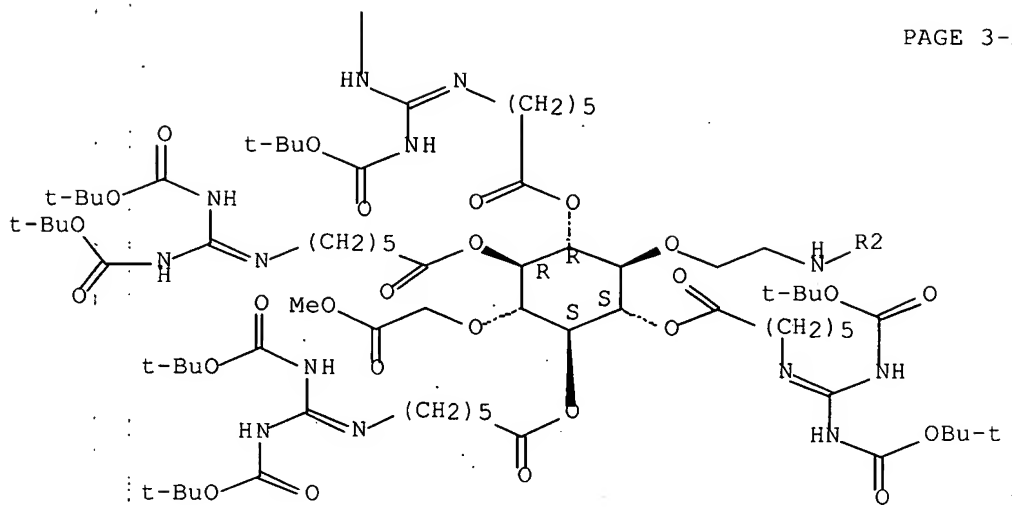
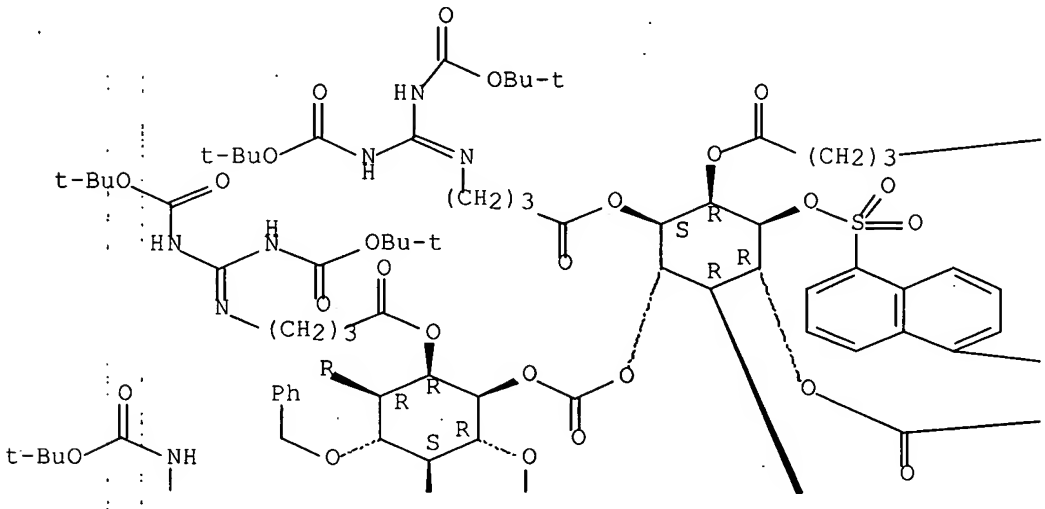


RN 929623-34-7 HCAPLUS

CN myo-Inositol, 4-O-(phenylmethyl)-, 2,3,5,6-tetrakis[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]butanoate] 1-(hydrogen carbonate), 6-ester with myo-inositol 1,2,4,5-tetrakis[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]butanoate] 3-[5-(dimethylamino)-1-naphthalenesulfonate] (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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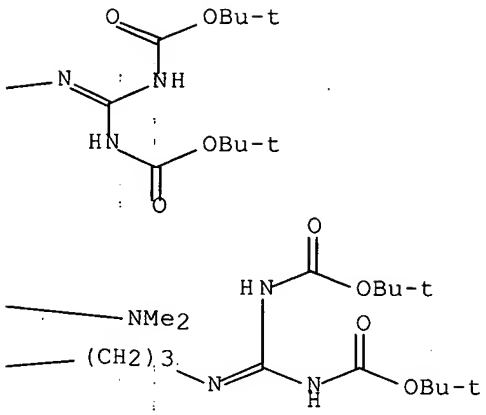

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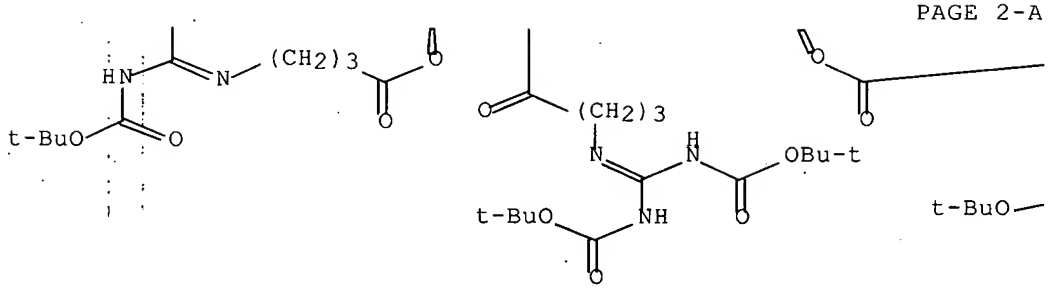

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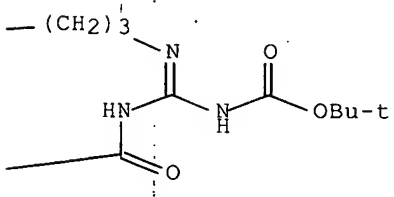

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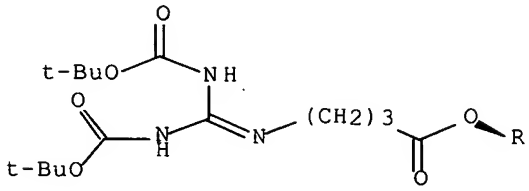

IT **929623-44-9P 929623-45-0P 929623-46-1P**
929708-16-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(design, synthesis, and delivery properties of novel guanidine-containing mol. transporters built on dimeric inositol scaffolds)

RN 929623-44-9 HCAPLUS

CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[4-[(aminoiminomethyl)amino]-1-oxobutyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-oxoethyl]-, 2,3,5,6-tetrakis[4-[(aminoiminomethyl)amino]butanoate], 2,2,2-trifluoroacetate (1:8) (CA INDEX NAME)

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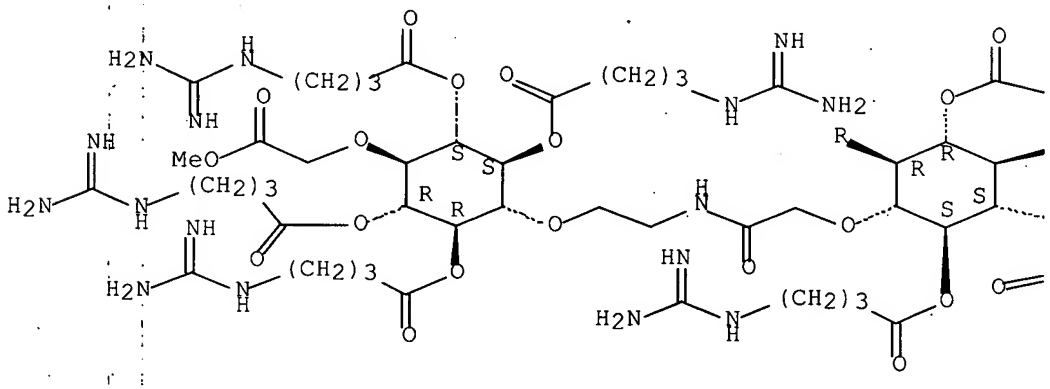
CRN 898814-85-2
CMF C82 H121 N27 O28 S

Relative stereochemistry.

PAGE 1-A



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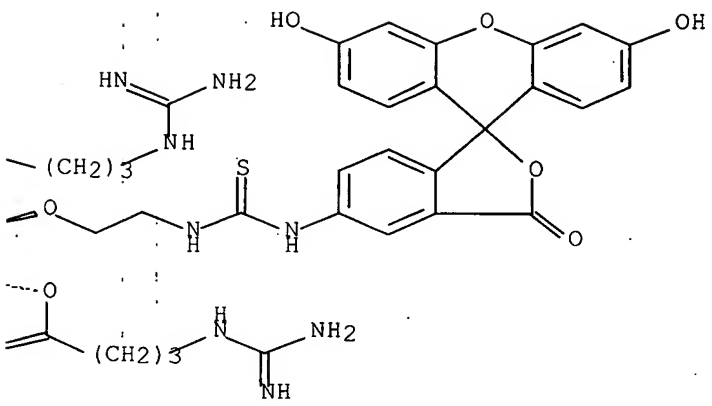

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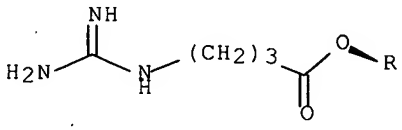

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CRN 76-05-1
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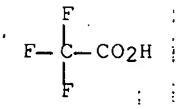

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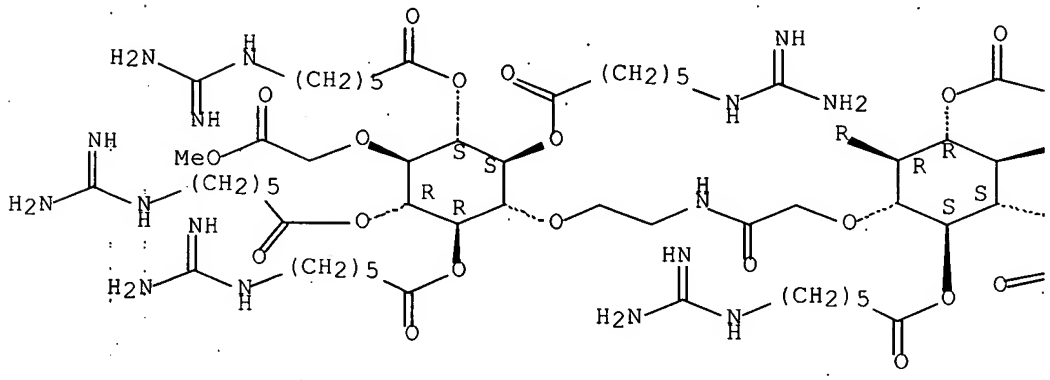
CM 1

CRN 898814-93-2
CMF C98 H153 N27 O28 S

Relative stereochemistry.

PAGE 1-A



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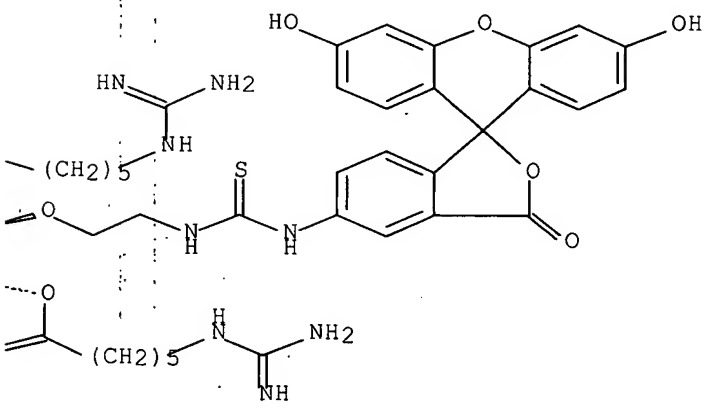

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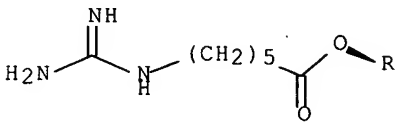

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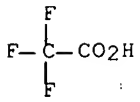

RN 929623-46-1 HCAPLUS
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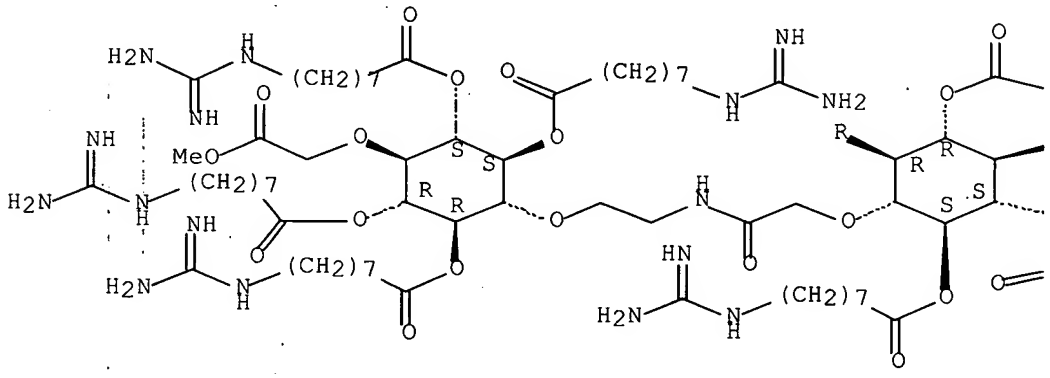
CM 1

CRN 898814-99-8
CMF C114 H185 N27 O28 S

Relative stereochemistry.

PAGE 1-A



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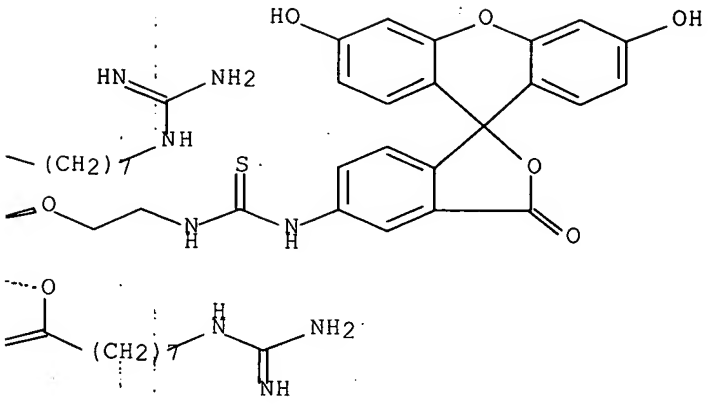

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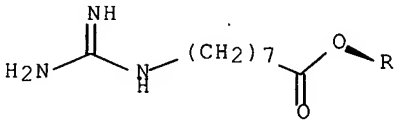

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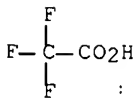
CRN 76-05-1
CMF C2 H F3 O2



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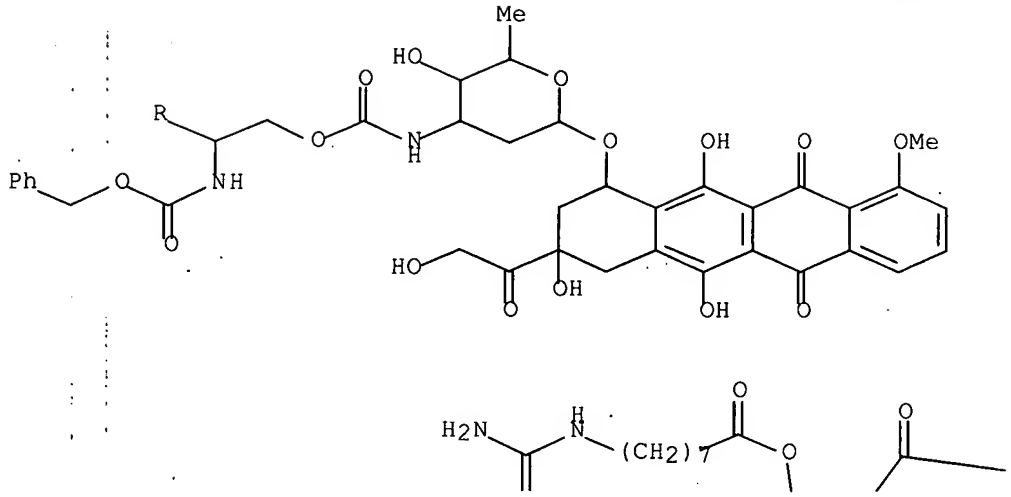
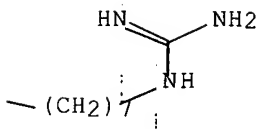
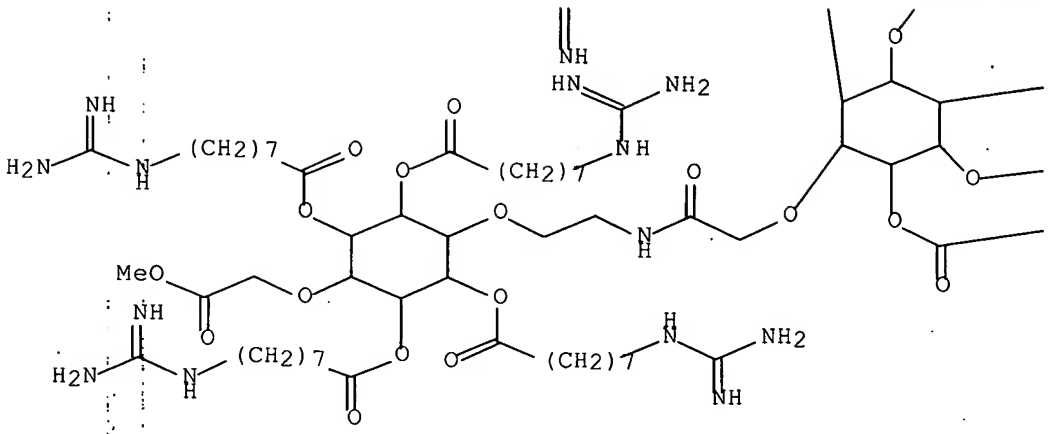
PAGE 1-A



PAGE 1-B



PAGE 2-A



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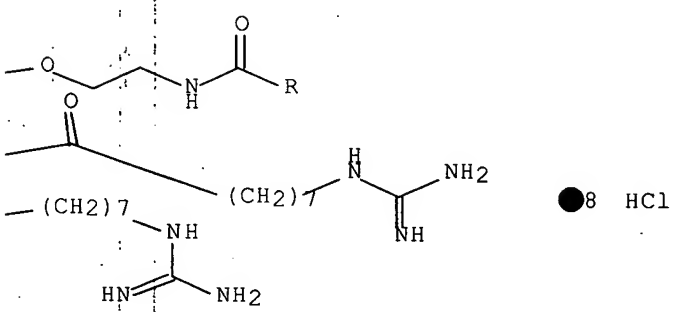


IT **929623-37-0P 929623-38-1P 929623-40-5P**
929623-41-6P 929623-42-7P 929623-43-8P
929707-92-6P
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(fluorescence microscope image; design, synthesis, and delivery properties of novel guanidine-containing mol. transporters built on dimeric inositol scaffolds)

RN 929623-37-0 HCAPLUS

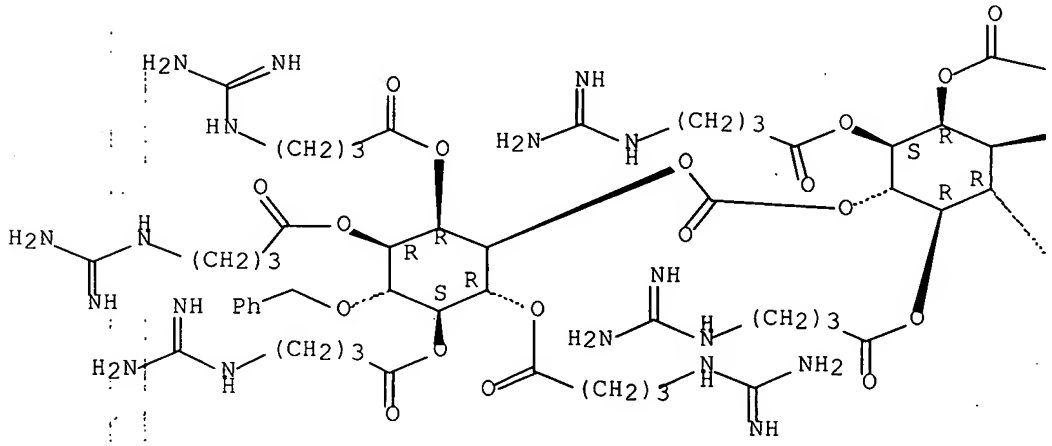
CN myo-Inositol, 4-O-(phenylmethyl)-, 2,3,5,6-tetrakis[4-[(aminoiminomethyl)amino]butanoate] 1-(hydrogen carbonate), 6-ester with myo-inositol 1,2,4,5-tetrakis[4-[(aminoiminomethyl)amino]butanoate] 3-[5-(dimethylamino)-1-naphthalenesulfonate], 2,2,2-trifluoroacetate (1:8) (CA INDEX NAME)

CM 1

CRN 929623-36-9
CMF C72 H111 N25 O23 S

Relative stereochemistry.

PAGE 1-A



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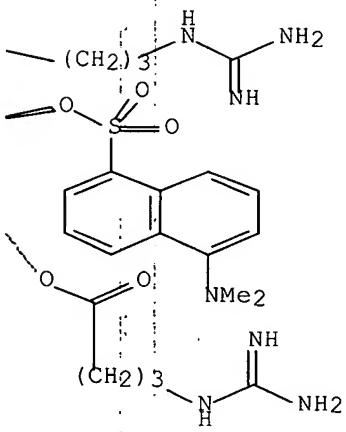
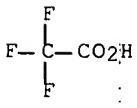


CM 2

CRN: 76-05-1
CMF C2 H F3 O2



RN 929623-38-1 HCAPLUS
CN myo-Inositol, 4-O-(phenylmethyl)-, 2,3,5,6-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] 1-(hydrogen carbonate), 6-ester with

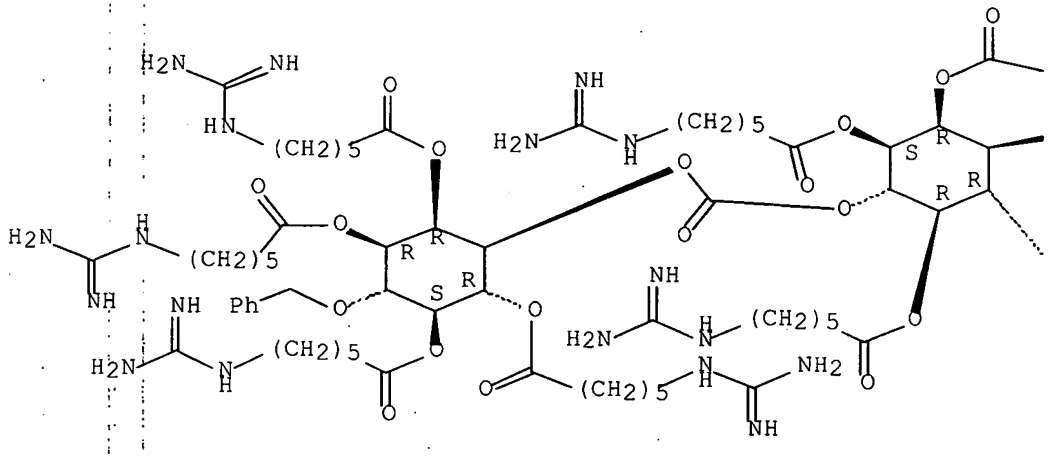
myo-inositol 1,2,4,5-tetrakis[6-[(aminoiminomethyl)amino]hexanoate]
3-[5-(dimethylamino)-1-naphthalenesulfonate], 2,2,2-trifluoroacetate (1:8)
(CA INDEX NAME)

CM 1

CRN 863892-13-1
CMF C88 H143 N25 O23 S

Relative stereochemistry.

PAGE 1-A



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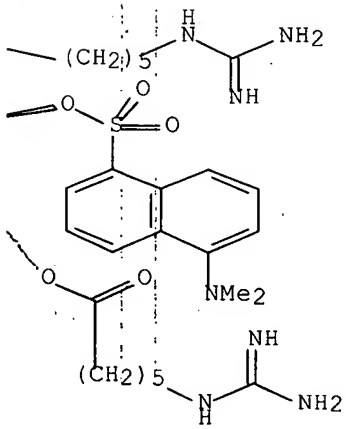
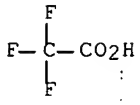


CM 2

CRN 76-05-1
CMF C2 H F3 O2



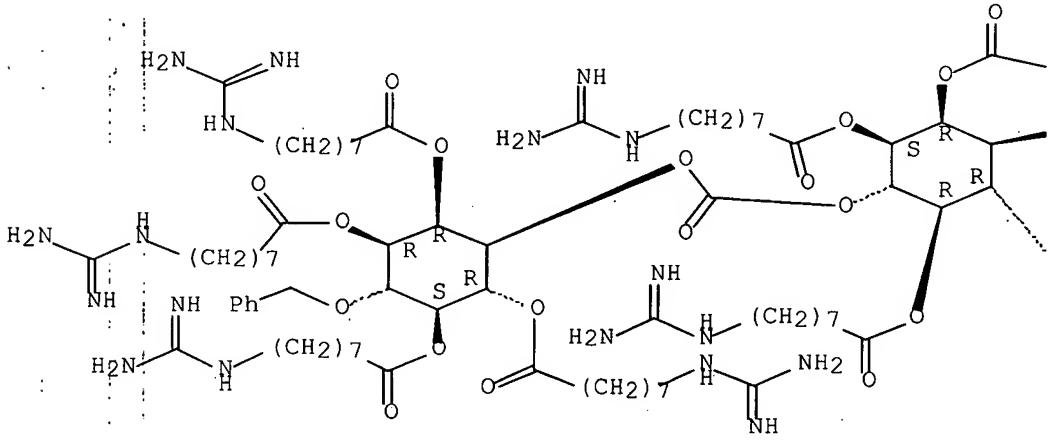
RN 929623-40-5 HCAPLUS
CN myo-Inositol, 4-O-(phenylmethyl)-, 2,3,5,6-tetrakis[8-[(aminoiminomethyl)amino]octanoate] 1-(hydrogen carbonate), 6-ester with myo-inositol 1,2,4,5-tetrakis[8-[(aminoiminomethyl)amino]octanoate] 3-[5-(dimethylamino)-1-naphthalenesulfonate], 2,2,2-trifluoroacetate (1:8) (CA INDEX NAME)

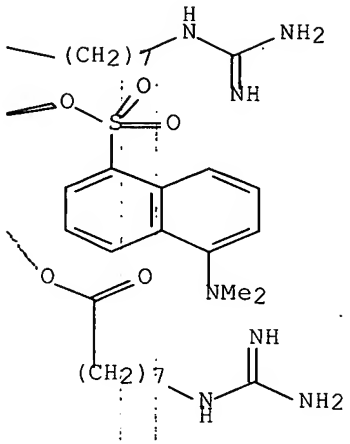
CM 1

CRN 929623-39-2
CMF C104 H175 N25 O23 S

Relative stereochemistry.

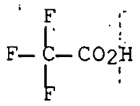
PAGE 1-A





CM 2

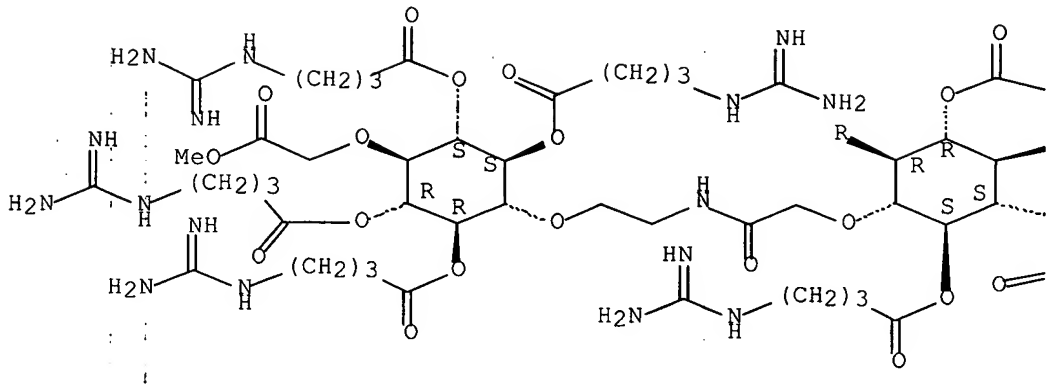
CRN 76-05-1
CMF C2 H F3 O2



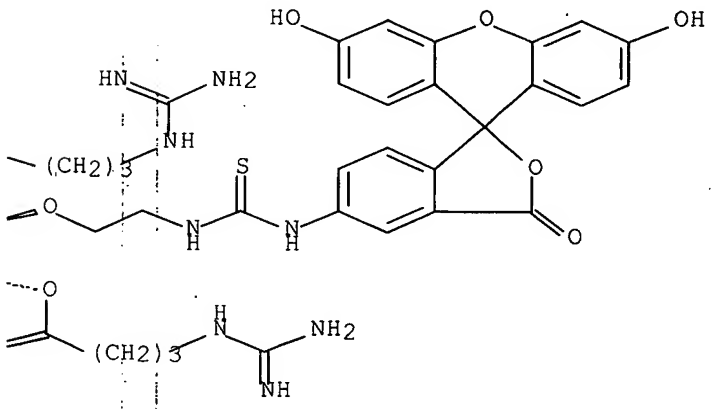
RN 929623-41-6 HCAPLUS
CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[4-[(aminoiminomethyl)amino]-1-oxobutyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-oxoethyl]-, 2,3,5,6-tetrakis[4-[(aminoiminomethyl)amino]butanoate], hydrochloride (1:8) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



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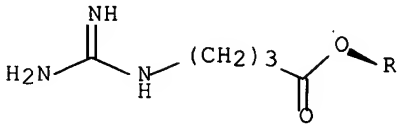


●8 HCl

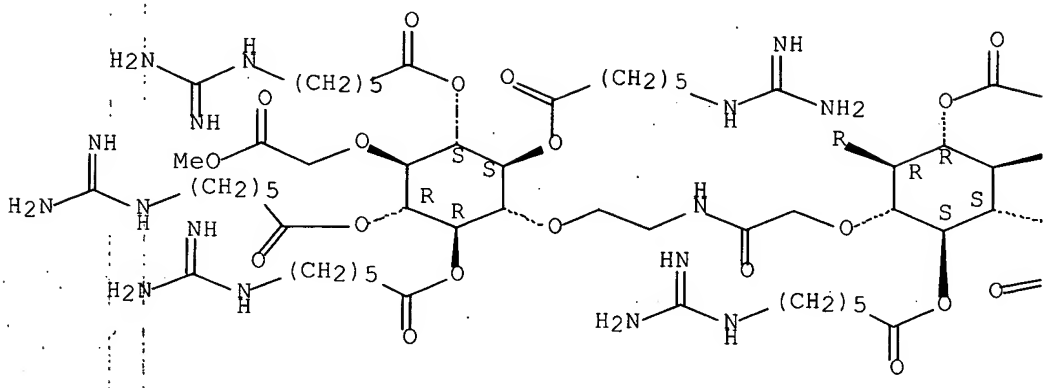
RN 929623-42-7 HCAPLUS

CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[6-[(aminoiminomethyl)amino]-1-oxohexyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-oxoethyl]-, 2,3,5,6-tetrakis[6-[(aminoiminomethyl)amino]hexanoate], hydrochloride

(1:8) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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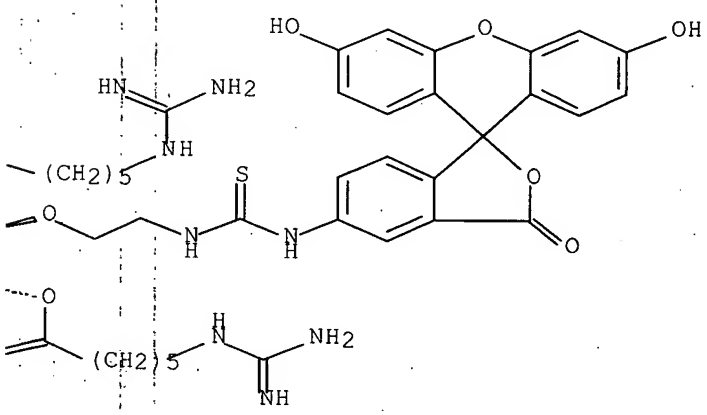

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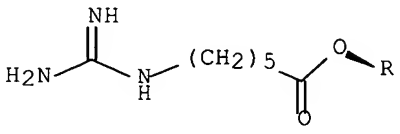


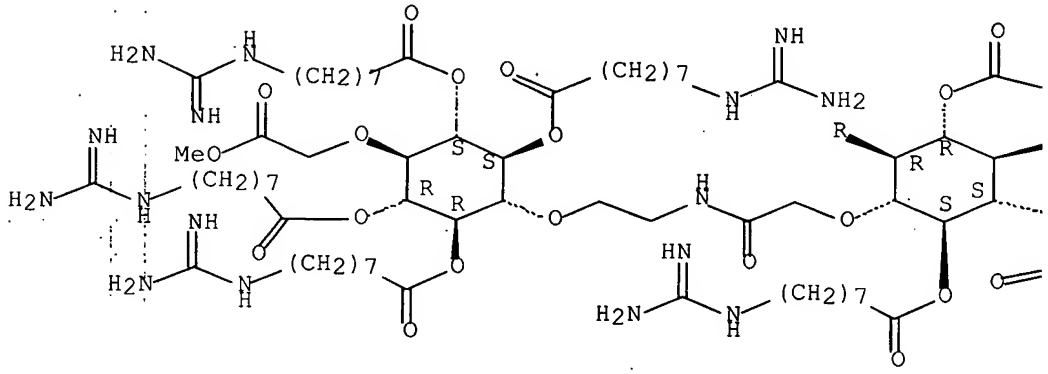
●8 HCl

RN 929623-43-8 HCAPLUS
CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-

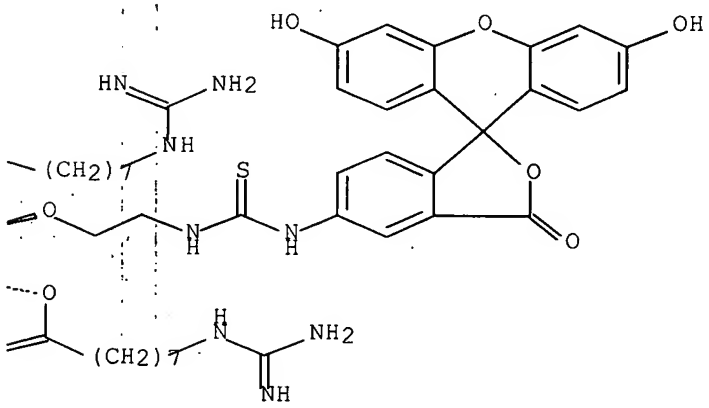
1(3H)-9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[8-[(aminoiminomethyl)amino]-1-oxooctyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-oxoethyl]-, 2,3,5,6-tetrakis[8-[(aminoiminomethyl)amino]octanoate], hydrochloride (1:8) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



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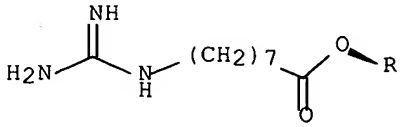


●8 HCl

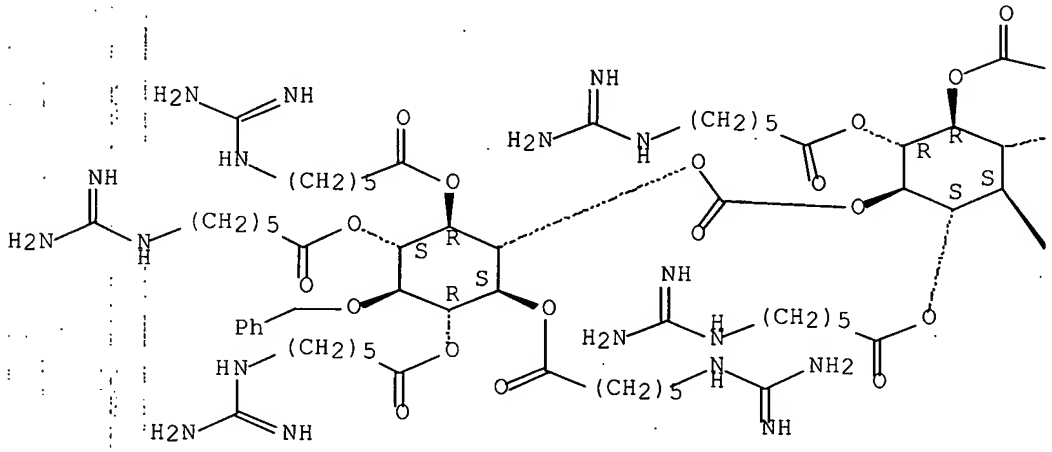
RN 929707-92-6 HCAPLUS
CN scyllo-Inositol, 2,3,5,6-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] 4-(hydrogen carbonate), 6-ester with scyllo-inositol 1,2,4,5-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] 3-[5-(dimethylamino)-1-naphthalenesulfonate], 2,2,2-trifluoroacetate (1:8) (CA INDEX NAME)

CM 1

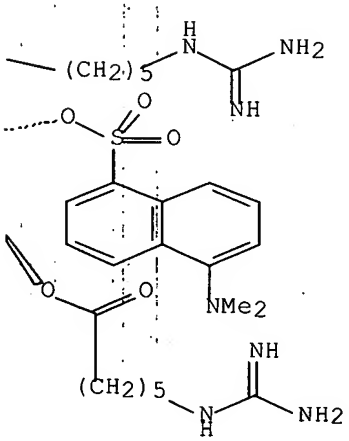
CRN 929707-91-5
CMF C88 H143 N25 O23 S

Relative stereochemistry.

PAGE 1-A

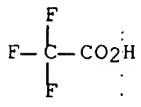


PAGE 1-B



CM 2

CRN: 76-05-1
CMF: C2 H F3 O2



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L137 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN POST PRIORTY/FILING
ACCESSION NUMBER: 2006:483914 HCAPLUS Full-text
DOCUMENT NUMBER: 145:152384
TITLE: Design, synthesis, and membrane-translocation studies of inositol-based transporters
AUTHOR(S): Maiti, Kaustabh K.; Jeon, Ock-Youm; Lee, Woo Sirl; Kim, Dong-Chan; Kim, Kyong-Tai; Takeuchi, Toshihide; Futaki, Shiroh; Chung, Sung-Kee
CORPORATE SOURCE: Department of Chemistry, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Angewandte Chemie, International Edition (2006), 45(18), 2907-2912
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:152384

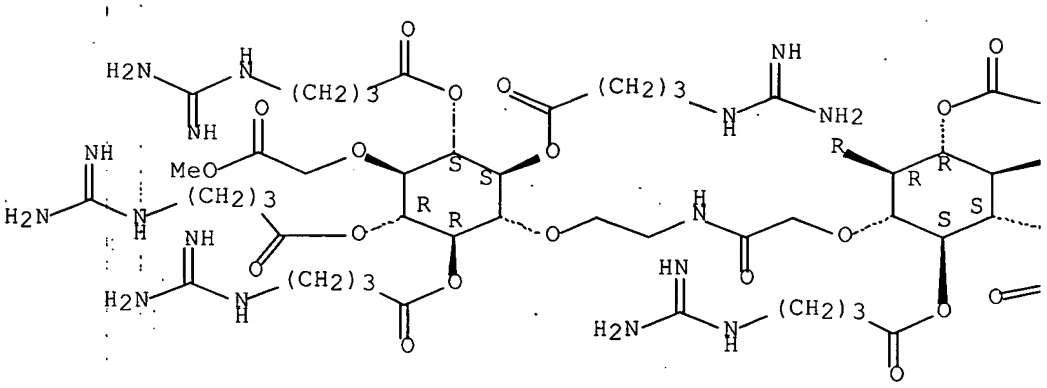
AB Delivery vehicles: Novel guanidine-containing "transporters" constructed on a dimeric inositol scaffold show significant translocation across the cell membrane and the blood-brain barrier, as well as unique in vitro and in vivo distributions. Doxorubicin was efficiently delivered to mouse-brain tissue by conjugating the compound with such a transporter (see the fluorescence microscopy image).

IT **898814-85-2P 898814-93-2P 898814-99-8P**
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(design, synthesis, and membrane-translocation studies of inositol-based transporters)

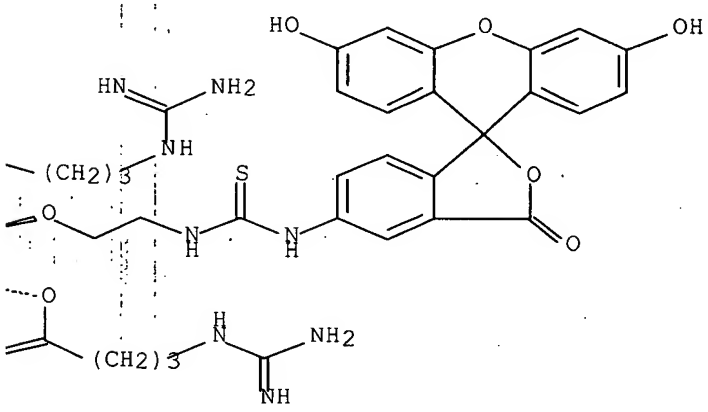
RN 898814-85-2 HCAPLUS
CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]carbonyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[4-[(aminoiminomethyl)amino]-1-oxobutyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-ethyl]-, 2,3,5,6-tetrakis[4-[(aminoiminomethyl)amino]butanoate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

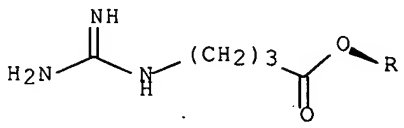
PAGE 1-A



PAGE 1-B



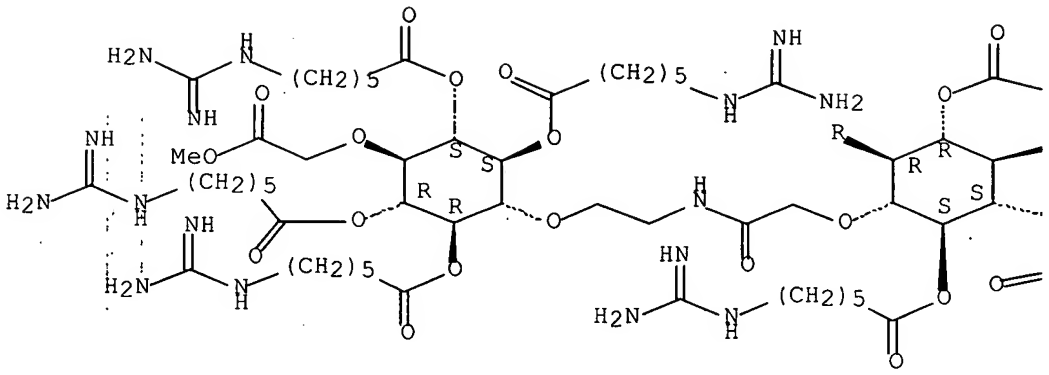
PAGE 2-A



RN 898814-93-2 HCAPLUS
CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]carbonyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[6-[(aminoiminomethyl)amino]-1-oxohexyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-ethyl]-, 2,3,5,6-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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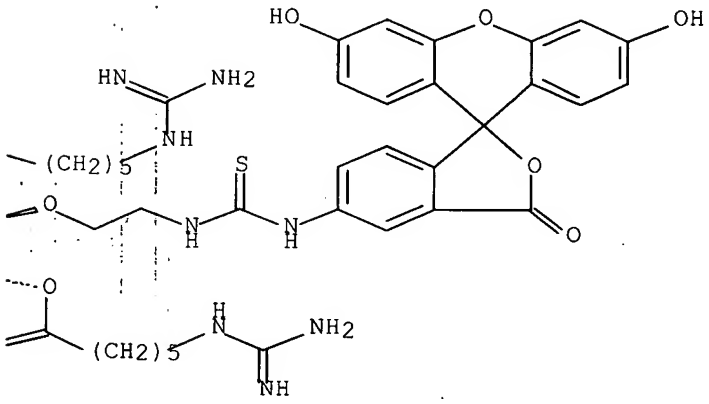

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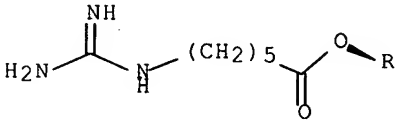
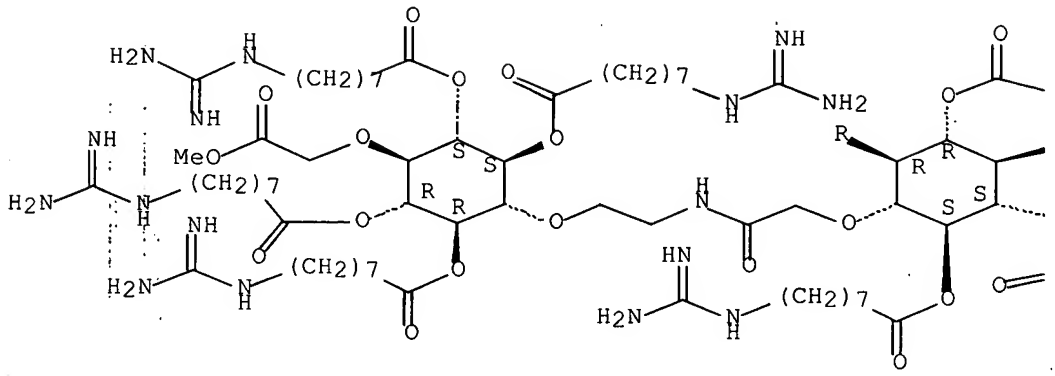


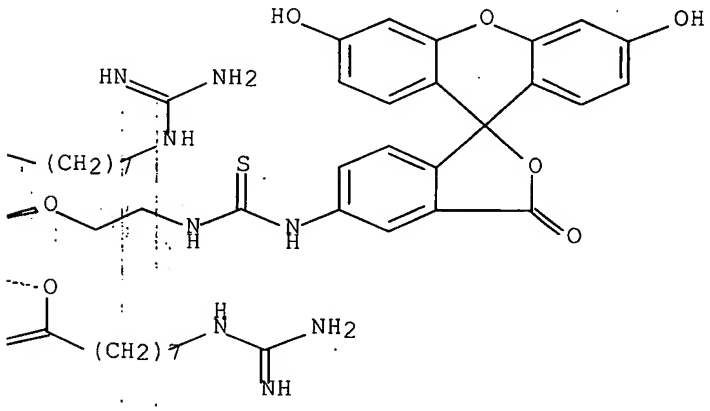
RN 898814-99-8 HCAPLUS
CN scyllo-Inositol, 1-O-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]carbonyl]amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[8-[(aminoiminomethyl)amino]-1-oxooctyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-ethyl]-, 2,3,5,6-tetrakis[8-[(aminoiminomethyl)amino]octanoate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



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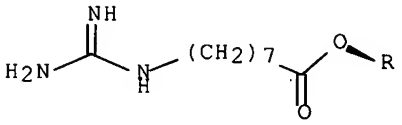
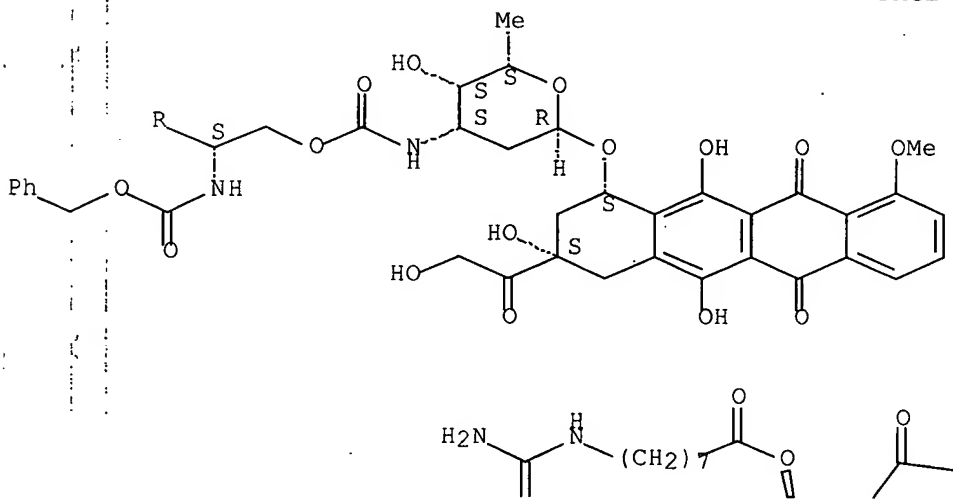


IT 898815-05-9
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(design, synthesis, and membrane-translocation studies of inositol-based transporters)
RN 898815-05-9 HCAPLUS
CN D-scyllo-Inositol, 1-O-[2-[[(2S)-3-(carboxyoxy)-1-oxo-2-

[[(phenylmethoxy)carbonyl]amino]propyl]amino]ethyl]-4-O-[2-oxo-2-[[2-[2,3,5,6-tetrakis-O-[8-[(aminoiminomethyl)amino]-1-oxooctyl]-4-O-(2-methoxy-2-oxoethyl)-D-scyllo-inositol-1-O-yl]ethyl]amino]ethyl]-, 2,3,5,6-tetrakis[8-[(aminoiminomethyl)amino]octanoate], amide with (8S,10S)-10-[(3-amino-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-5,12-naphthacenedione (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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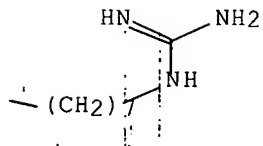

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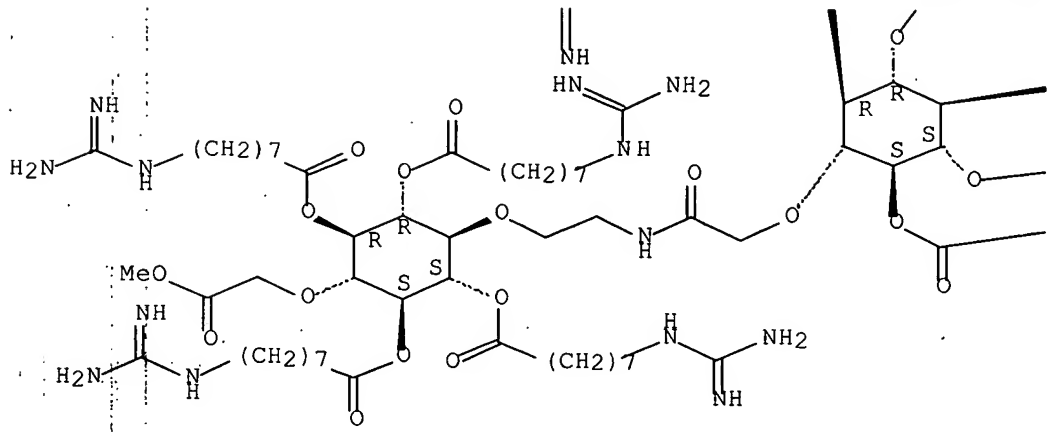

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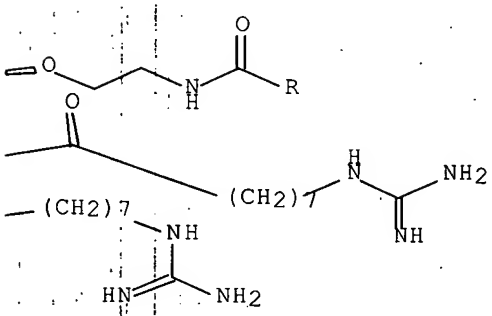


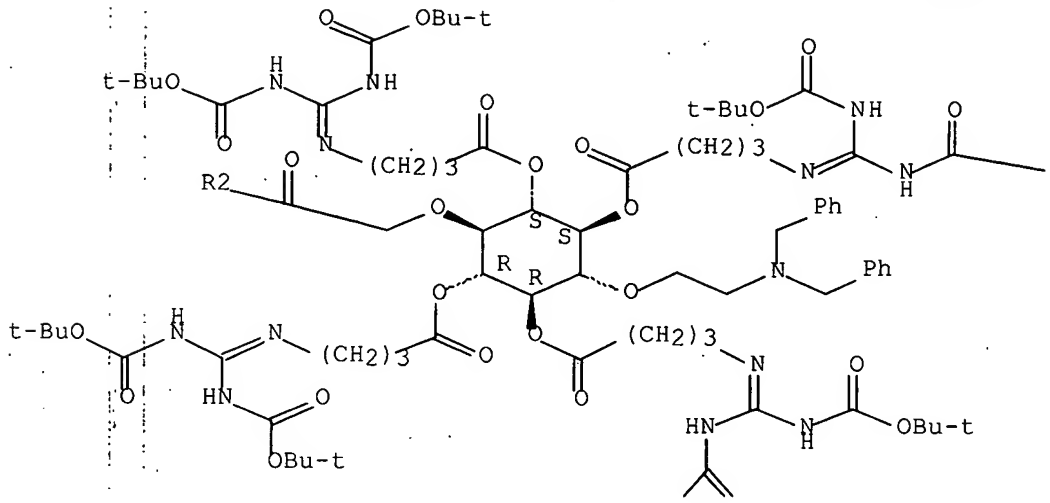
IT **898815-49-1P 898815-54-8P 898815-81-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(design, synthesis, and membrane-translocation studies of inositol-based transporters)

RN 898815-49-1 HCAPLUS

CN scyllo-Inositol, 1-O-[2-[bis(phenylmethyl)amino]ethyl]-4-O-[2-[[2-[2,3,5,6-tetrakis-O-[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-1-oxobutyl]-4-O-(2-methoxy-2-oxoethyl)-scyllo-inositol-1-O-yl]ethyl]amino]-2-oxoethyl]-, 2,3,5,6-tetrakis[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]butanoate] (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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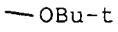

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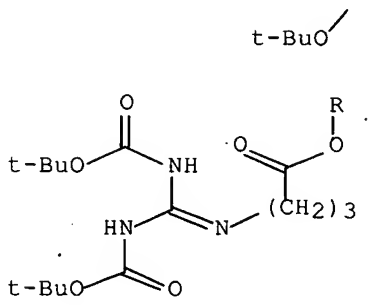

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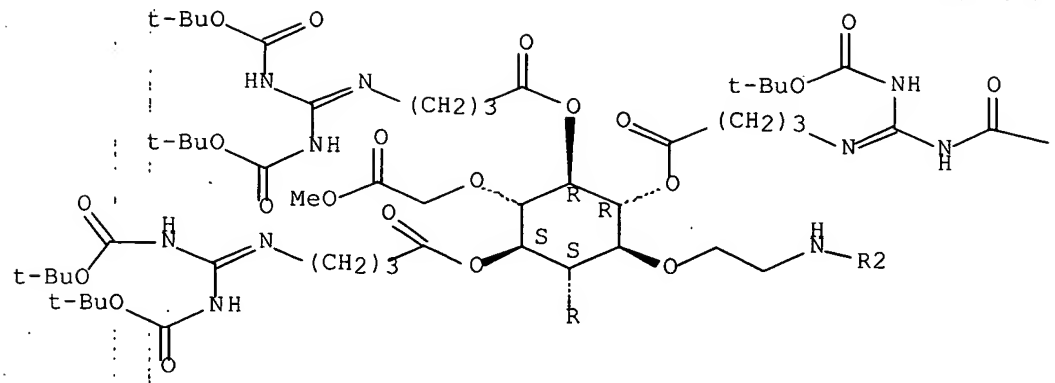

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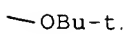
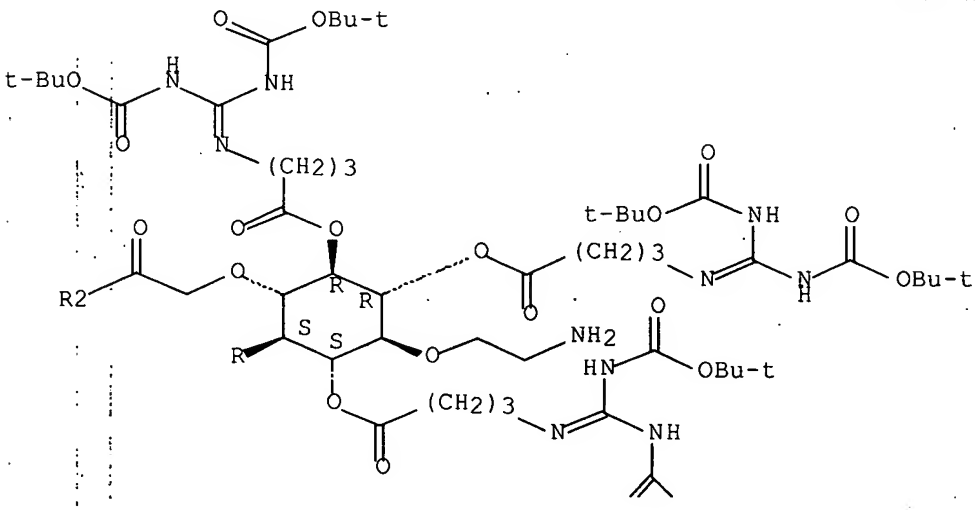


RN 898815-54-8 HCAPLUS

CN scyllo-Inositol, 1-O-[2-[[[4-O-(2-aminoethyl)-2,3,5,6-tetrakis-O-[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-1-oxobutyl]-scyllo-inositol-1-O-yl]acetyl]amino]ethyl]-4-O-(2-methoxy-2-oxoethyl)-, 2,3,5,6-tetrakis[4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]butanoate] (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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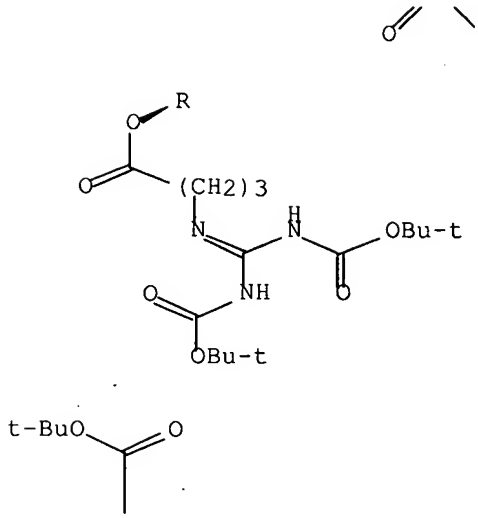

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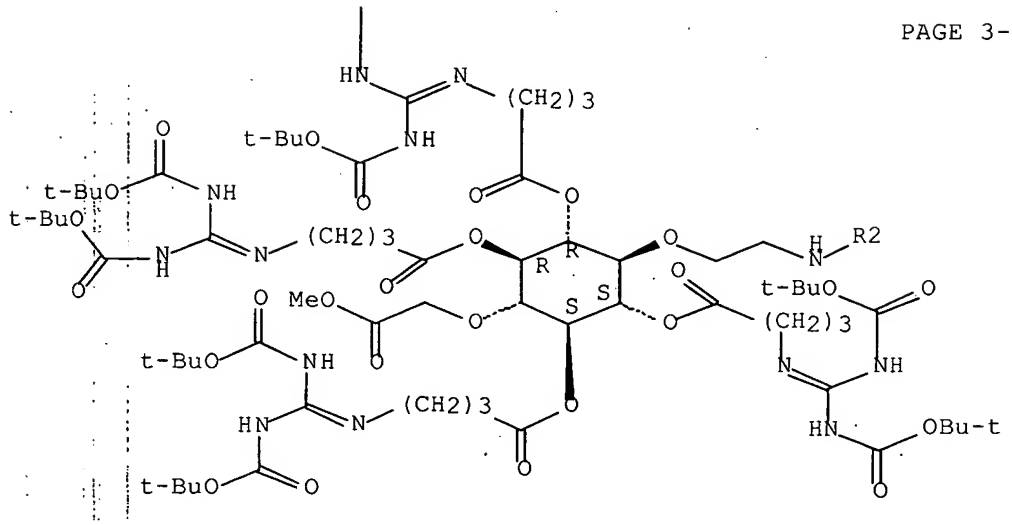
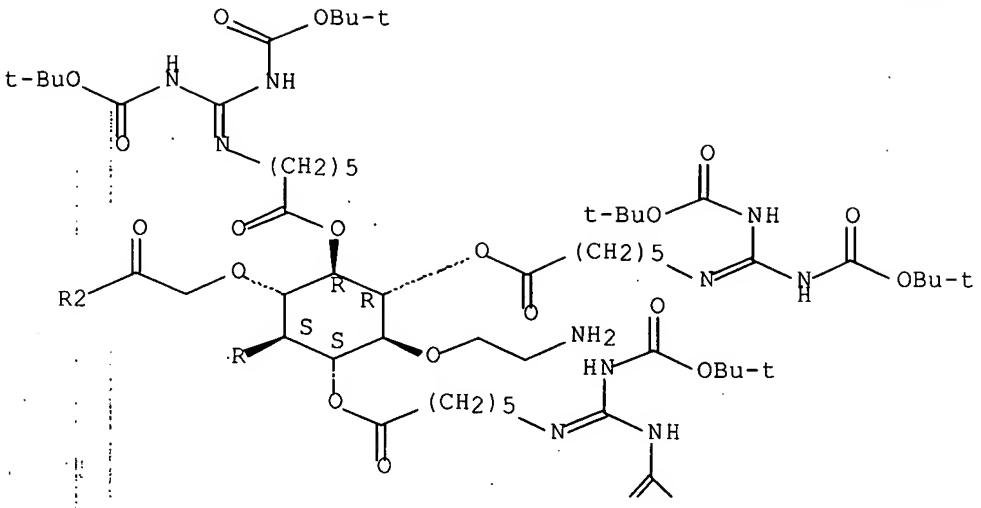


RN 898815-81-1 HCAPLUS
CN scyllo-Inositol, 1-O-[2-[[[4-O-(2-aminoethyl)-2,3,5,6-tetrakis-O-[6-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-1-oxohexyl]-scyllo-inositol-1-O-yl]acetyl]amino]ethyl]-4-O-(2-methoxy-2-oxoethyl)-, 2,3,5,6-tetrakis[6-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]hexanoate] (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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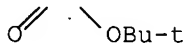

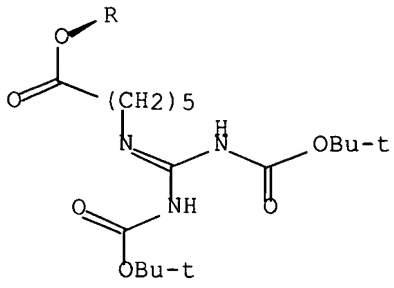

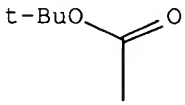

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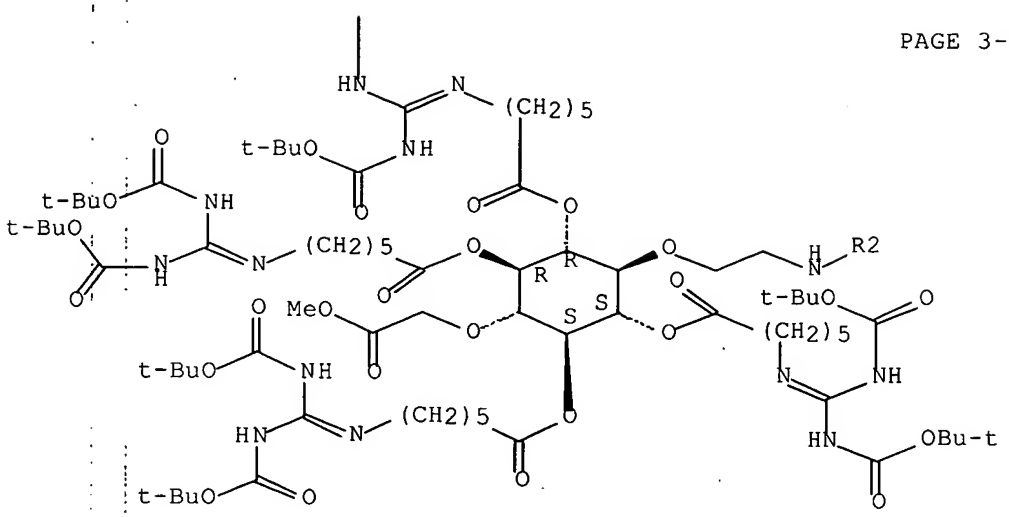

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L137 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1004682 HCAPLUS Full-text
DOCUMENT NUMBER: 143:306498
TITLE: Inositol-based molecular transporters and processes for the preparation thereof
INVENTOR(S): Chung, Sung-Kee; Jeon, Ock-Younm; Maiti, Kaustabh Kumar; Yu, Seok-Ho
PATENT ASSIGNEE(S): Postech Foundation, S. Korea
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

This is WIPO of my Applic.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005085159	A1	20050915	WO 2004-KR1982	20040806
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2005089422	A	20050908	KR 2004-14833	20040305
EP 1678110	A1	20060712	EP 2004-748517	20040806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2007523889	T	20070823	JP 2006-546800	20040806
US 2006280796	A1	20061214	US 2006-565164	20060119

PRIORITY APPLN. INFO.: KR 2004-14833 A 20040305
WO 2004-KR1982 W 20040806

OTHER SOURCE(S): MARPAT 143:306498

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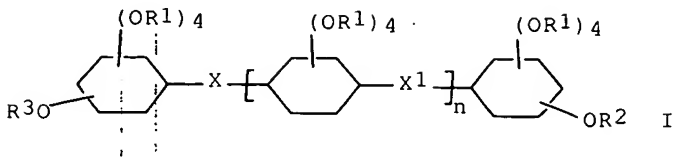


I

AB Inositol derivs. I, wherein R1 is CO(CH2)p-NH-C(:NH)-NH2, p is 1-12; R2 and R3 are independently H, alkyl, arylalkyl, cycloalkyl, heteroalkyl, alkylamine, acyl, alkyl-carboxylate, sulfonyl; n is 0-2; X and X1 are independently O-CO-O, O-CO-NH-(CH2)m-O; O-CO, (CH2)q-O, O-(CH2)q-CO-NH-(CH2)m-O; q is 1-5, were prepared and are effective in significantly enhancing the transportation of various therapeutic mols. across a biol. membrane, which may include the plasma membrane, nuclear membrane or blood-brain barrier. Thus, 4-O-(2-aminoethyl)-1-O- (methyloxycarbonylmethyl)-2,3:5,6-di-O-isopropylidene-scyllo-inositol was prepared and tested as mol. transporter of various therapeutic mols. across a biol. membrane.

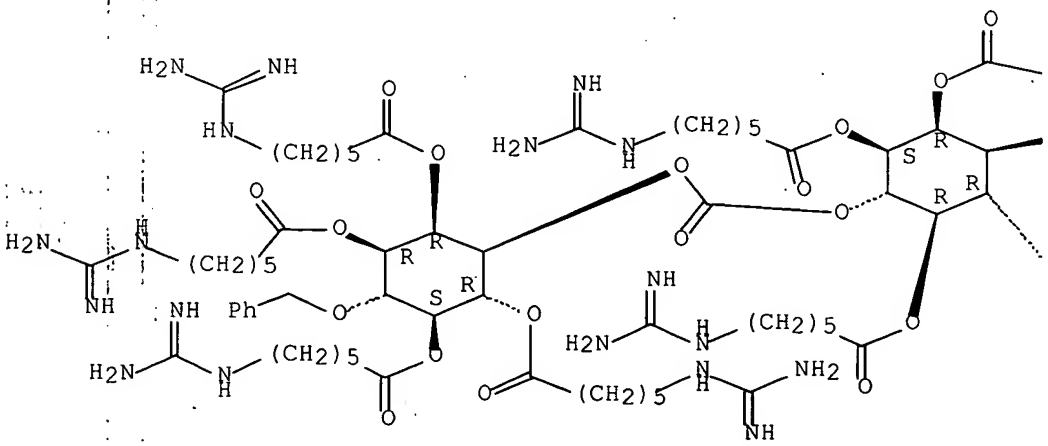
IT **863892-13-1P 863892-14-2P**
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inositol-based mol. transporters and processes for the preparation thereof)

RN 863892-13-1 HCAPLUS

CN myo-Inositol, 4-O-(phenylmethyl)-, 2,3,5,6-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] 1-(hydrogen carbonate), ester with myo-inositol 1,2,4,5-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] 3-[5-(dimethylamino)-1-naphthalenesulfonate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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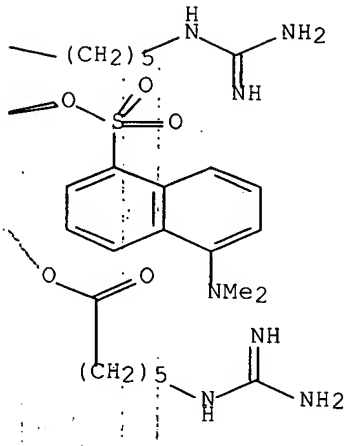
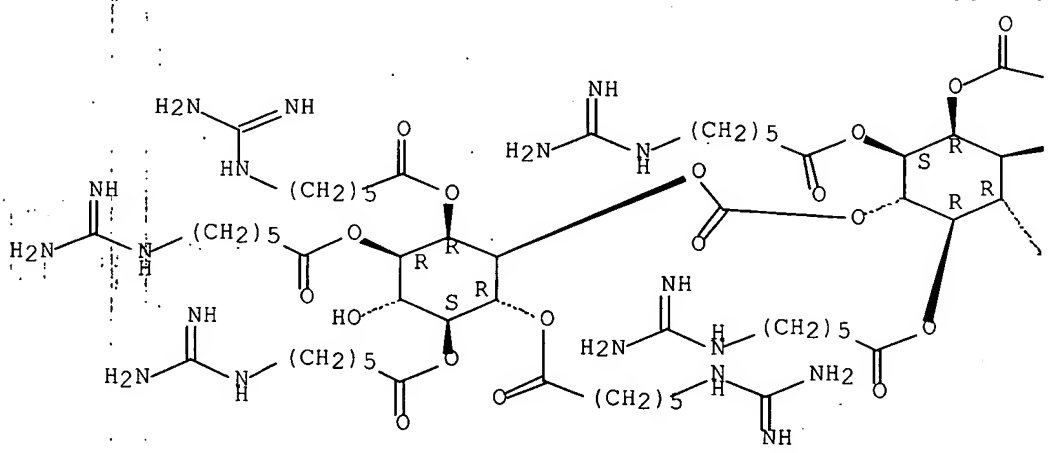


RN 863892-14-2 HCAPLUS
CN myo-Inositol, 1,2,4,5-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] 6-(hydrogen carbonate) 3-[5-(dimethylamino)-1-naphthalenesulfonate], 3-ester with myo-inositol 1,2,4,5-tetrakis[6-[(aminoiminomethyl)amino]hexanoate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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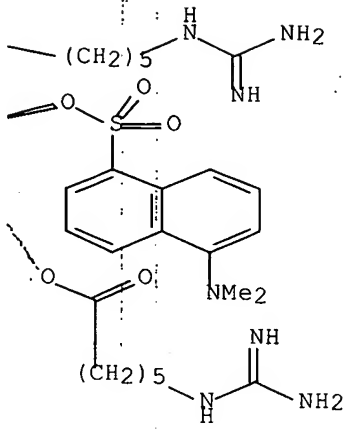
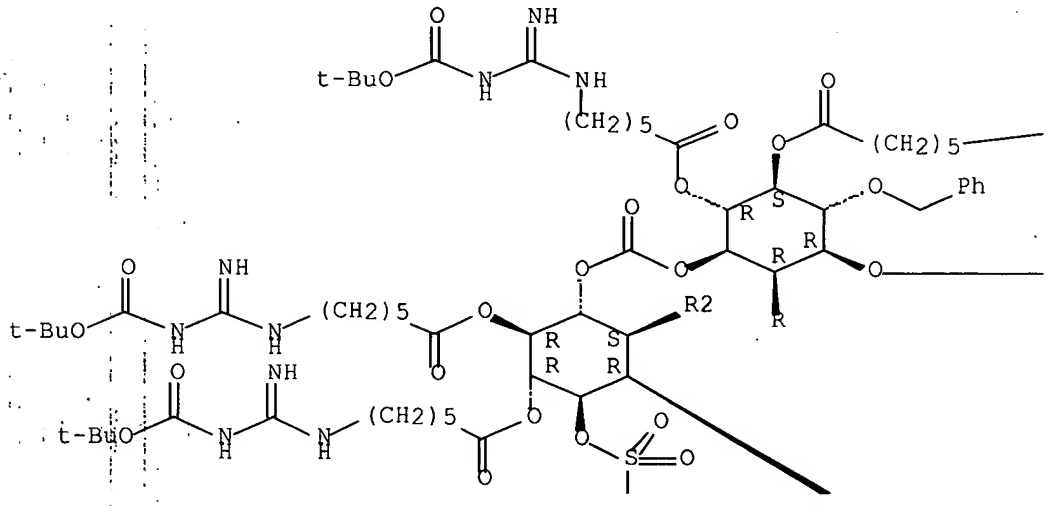


IT **863892-12-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(inositol-based mol. transporters and processes for the preparation thereof)
RN 863892-12-0 HCAPLUS
CN myo-Inositol, 4-O-(phenylmethyl)-, 2,3,5,6-tetrakis[6-[[[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]amino]hexanoate] 1-(hydrogen carbonate), ester with myo-inositol 1,2,4,5-tetrakis[6-[[[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]amino]hexanoate] 3-[5-(dimethylamino)-1-naphthalenesulfonate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



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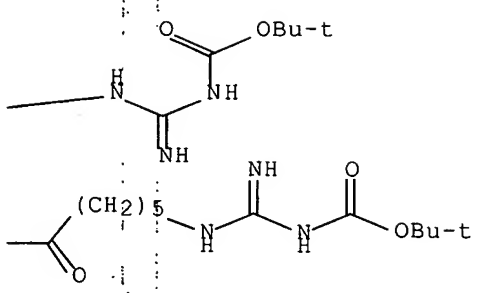

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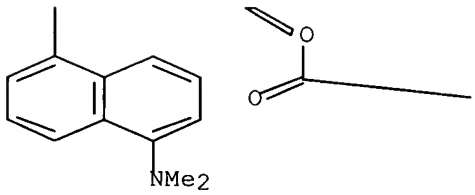

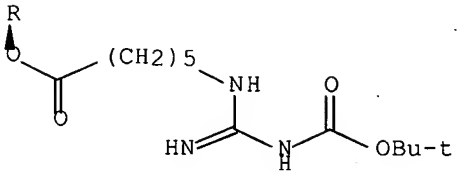

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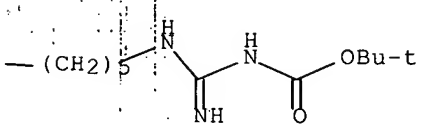

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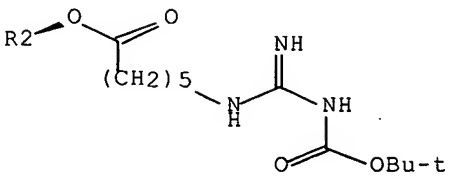

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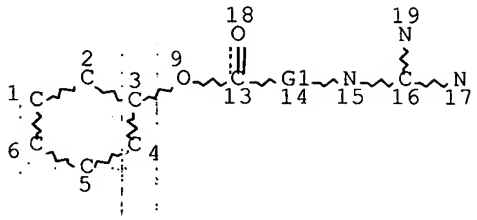

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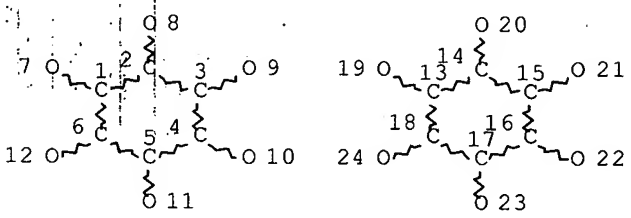
L135 STR



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NUMBER OF NODES IS 24

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L140 1574 SEA FILE=HCAPLUS ABB=ON PLU=ON KUMAR K/AU OR KUMAR K ?/AU
L141 540 SEA FILE=HCAPLUS ABB=ON PLU=ON "YU SEOK"/AU OR "YU SEOK HO"/AU OR YU S/AU OR YU S H?/AU
L142 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L138 AND (L139 OR L140 OR

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L146        720 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L145
L147          1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L138 OR L139 OR L140 OR
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L148         13 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L142 OR L143 OR L144 OR
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POST FILING/PRIORITY

L148 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:986589 HCAPLUS Full-text

TITLE: Divergent Synthesis of All Possible Optically Active Regioisomers of Myo-Inositol Mono- and Bisphosphates

AUTHOR(S): Seo, Kyung-Chang; **Yu, Seok-Ho; Chung, Sung-Kee**

CORPORATE SOURCE: Department of Chemistry, Pohang University of Science & Technology, Pohang, S. Korea

SOURCE: Journal of Carbohydrate Chemistry (2007), 26(5&6), 305-327
CODEN: JCACDM; ISSN: 0732-8303

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB All possible optically active regioisomers of myo-inositol mono- and bis-phosphates were synthesized using inositol derivs. suitably protected with various protecting groups (IRns) as key intermediates. A series of procedures including Novozym 435 catalyzed enzymic resolution of (3aR,4S,7S,7aR)-rel-3a,4,7,7a-tetrahydro-2,2-dimethyl-1,3-benzodioxole-4,7- diol diacetate, several protection and deprotection reactions, and acyl migration afforded two enantiomeric pairs of IR5 and six enantiomeric pairs of IR4. Phosphorylation of these key intermediates by the phosphitylation and oxidation procedure gave the target products after removal of the protecting groups.

IT INDEXING IN PROGRESS

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

POST FILING/PRIORITY

L148 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:319217 HCAPLUS Full-text

TITLE: Construction of sphingolipids libraries and their utilities

AUTHOR(S): Park, Jeong-Ju; **Yu, Seok-Ho; Chung, Sung-Kee**

CORPORATE SOURCE: Department of Chemistry, Pohang University of Science and Technology, Pohang, 790-784, S. Korea

SOURCE: International Journal of the Society of Materials Engineering for Resources (2006), 14(1/2), 18-21
CODEN: IMEREB; ISSN: 1347-9725

PUBLISHER: Society of Materials Engineering for Resources of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sphingolipids such as ceramide and glycosylceramide have recently attracted intense research interests because of their roles as signalling mols. in many important physiol. processes, such as apoptosis, inflammation and immune responses. Their well-defined modular structures are ideally amenable to library formation for medicinal chemical investigations. We have developed practical, divergent synthetic routes to sphingosine and phytosphingosine isomers as well as to carba-sugar analogs of all D-aldohexopyranose isomers toward these goals. And then we have proceeded to prepare ceramide libraries, composed of more than 500 compds. each, based on these sphingosine and phytosphingosine isomers, and demonstrated their utility in cell-based bioassays involving activation of NF-κB and induction of apoptosis. We are also in the process of forming libraries of mono-glycosylceramide and mono-carba- glycosylceramide.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:105547 HCAPLUS Full-text POST FILING/PRIORITY
TITLE: Design, synthesis, and delivery properties of novel guanidine-containing molecular transporters built on dimeric inositol scaffolds
AUTHOR(S): Maiti, K. K.; **Jeon, O.-Y.**; Lee, W. S.; **Chung, S.-K.**
SOURCE: Chemistry--A European Journal (2007), 13(3), No pp. given
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal; Errata
LANGUAGE: English
AB Unavailable

L148 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1322934 HCAPLUS Full-text POST FILING/PRIORITY
DOCUMENT NUMBER: 146:229525
TITLE: Practical syntheses of optically active carbagalactose and their potential application to the carbocyclic analogues of KRN7000
AUTHOR(S): **Yu, Seok-Ho**; Park, Jeong-Ju; **Chung, Sung-Kee**
CORPORATE SOURCE: Department of Chemistry, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Tetrahedron: Asymmetry (2006), 17(21), 3030-3036
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:229525
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Carba-α- and β-D-galactose derivs. were efficiently prepared from a cyclohex-3-ene-1,2-diol derivative I. Regioselective inversion of 2-OH, and stereoselective dihydroxylation of I were accomplished to provide a carba-β-D-

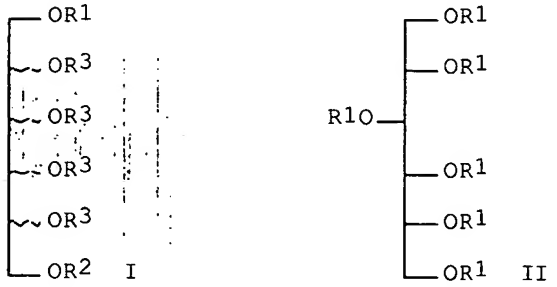
galactose derivative II in a good yield and with a high stereoselectivity. Stereo-inversion of 1-OH of II via oxidation/reduction gave carba-α-D-galactose derivative III with a high stereoselectivity. An efficient coupling of carba-α-galactose III with an aziridine derivative of sphingosine has been demonstrated to give 1-O-carba-α-galactosyl sphingosine derivative IV.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1155705 HCAPLUS Full-text POST FILING - PRIORITY
DOCUMENT NUMBER: 145:471812
TITLE: Preparation of glycoside, oligosaccharide and cyclitol molecular transporter analogs with high permeability through biological membranes
INVENTOR(S): **Chung, Sung-Kee**; Maiti, Kaustabh Kumar; Lee, Woo Sirl; **Jeon, Ock-Youm**; **Yu, Seok-Ho**
PATENT ASSIGNEE(S): Postech Foundation, S. Korea; Postech Academy-Industry Foundation
SOURCE: PCT Int. Appl., 74pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006115312	A1	20061102	WO 2005-KR2040	20050629
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
KR 2006112791	A	20061102	KR 2005-35410	20050428

PRIORITY APPLN. INFO.: KR 2005-35410 A 20050428
OTHER SOURCE(S): MARPAT 145:471812
GI



AB Title compds. I, wherein R1 and R2 are independently H, alkyl, arylalkyl, cycloalkyl, etc.; R3 is a ketoalkylamino guanidine analog are prepared as mol. transporter analogs with permeability for biol. active mols. Thus, II (R1 is -CO-(CH2)5NH-C=(NH)-NH2 hydrochloride salt) was prepared and tested for membrane permeability via fluorescent imaging (no data). In general, I displays good permeability when measured against an arginine nonamer for crossing biol. membrane such as a plasma membrane, nuclear membrane and blood-brain barrier.

IT **913834-26-1P**

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

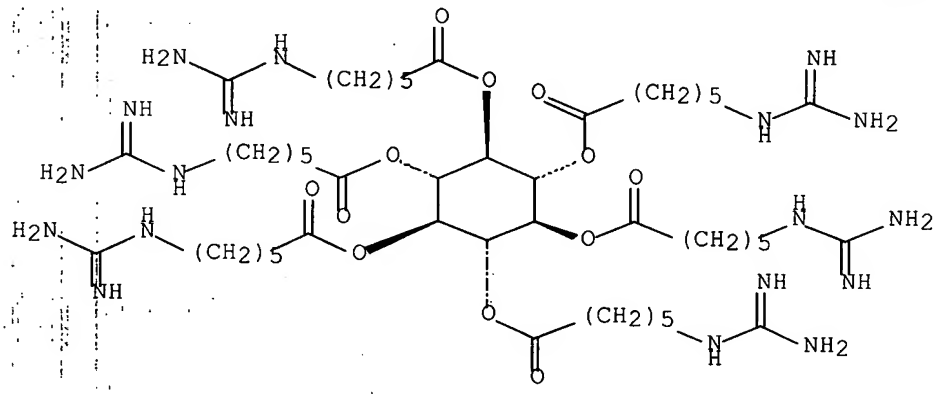
(preparation of glycoside, oligosaccharide and cyclitol mol. transporter analogs with high permeability through biol. membranes)

RN 913834-26-1 HCAPLUS

CN scyllo-Inositol, hexakis[6-[(aminoiminomethyl)amino]hexanoate], hexahydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

●6 HCl

IT **913834-24-9P 913834-25-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

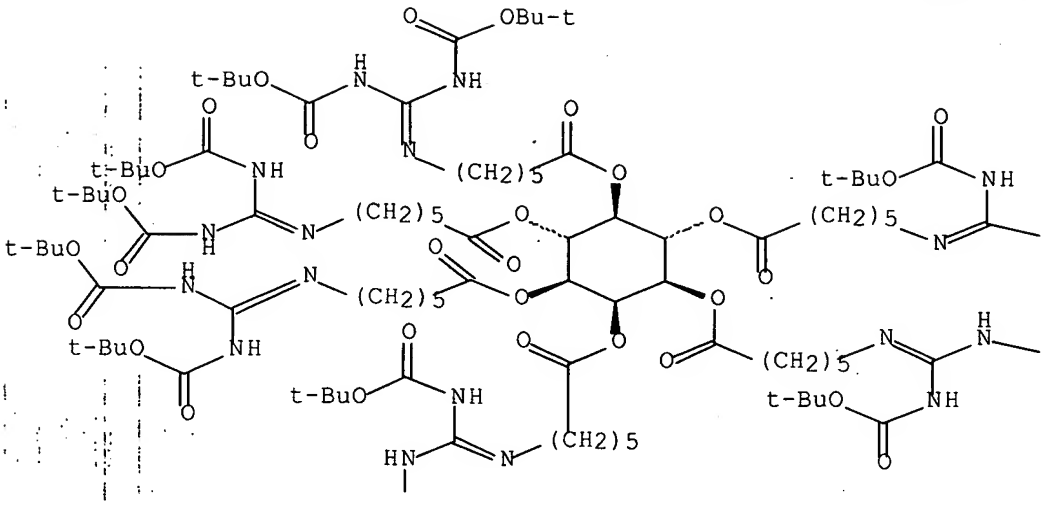
(preparation of glycoside, oligosaccharide and cyclitol mol. transporter analogs with high permeability through biol. membranes)

RN 913834-24-9 HCAPLUS

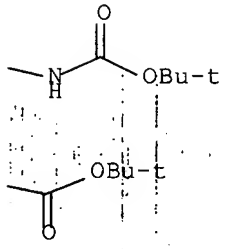
CN myo-Inositol, hexakis[6-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]hexanoate] (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



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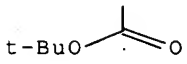
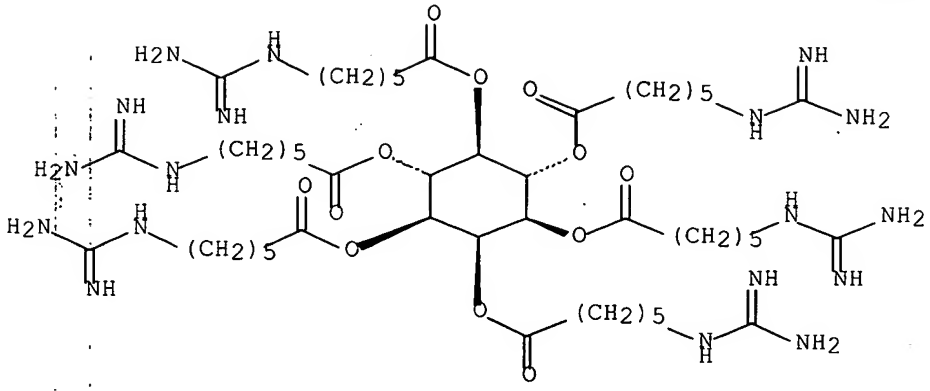


RN 913834-25-0 HCAPLUS
CN myo-Inositol, hexakis[6-[(aminoiminomethyl)amino]hexanoate], hexahydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 2-A

●6 HCl

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN POST FILING/PRIORTY
ACCESSION NUMBER: 2005:923015 HCAPLUS Full-text
DOCUMENT NUMBER: 143:406069
TITLE: Divergent syntheses of all 16 carba-sugar stereoisomers via stereo-conversion of carba-β-D-altropyranose derivatives
AUTHOR(S): **Yu, Seok-Ho; Chung, Sung-Kee**
CORPORATE SOURCE: Department of Chemistry, Division of Molecular and Life Sciences, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Tetrahedron: Asymmetry (2005), 16(16), 2729-2747 CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:406069

AB We have developed practical synthetic routes to enantiopure - and -carba-β-altrose derivs. and all the possible stereoisomers via their divergent stereo-conversions. Carba-β-D-altrose was prepared from 3-cyclohexene-1-carboxylic acid and converted to carba-β-D-mannose, carba-β-D-idose, and carba-β-D-talose derivs. via regio- and stereoselective oxidation/reduction of 3-OH and/or 4-OH. The four carba-sugar stereoisomers were then transformed to the remaining 12 carba-sugar stereoisomers and their 1,2-epoxides by regio- and stereoselective manipulation of hydroxyl groups in C1 and C2, which includes oxidation/reduction, Mitsunobu's reaction, olefination/dihydroxylation, and epoxidn./ring-opening protocols.

REFERENCE COUNT: 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:708411 HCAPLUS Full-text

POST FILING/PRIORTY

DOCUMENT NUMBER: 143:347371
TITLE: Syntheses of glycodendrimers having scyllo-inositol as the scaffold
AUTHOR(S): Lee, Nan-Young; Jang, Woo-Jae; **Yu, Seok-Ho**; Im, Jungkyun; **Chung, Sung-Kee**
CORPORATE SOURCE: Department of Chemistry, Division of Molecular and Life Sciences, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Tetrahedron Letters (2005), 46(36), 6063-6066
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:347371
AB Synthetic glycoconjugated dendrimers have emerged as important functional glycomimetics for studying multivalency effects in the cell-cell communications. We report herein, a synthetic route to functionalized glycodendrimers with scyllo-inositol as the scaffold, which have a directed geometry; one side of the dendrimers is designed for ready attachment to the AFM probe/solid matrix, and the other to have a varying number of a sugar.
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:655924 HCAPLUS Full-text
Post Filing/Priority
TITLE: Practical syntheses of enantiopure carbasugars: Toward all possible 16(32) stereoisomers via divergent synthetic strategy
AUTHOR(S): **Yu, Seok-Ho; Chung, Sung-Kee**
CORPORATE SOURCE: Department of Chemistry, Division of Molecular and Life Sciences, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United States, August 22-26, 2004 (2004), CARB-068. American Chemical Society: Washington, D. C.
CODEN: 69FTZ8
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB Currently, oligosaccharides or their analogs are emerging as potential therapeutic agents. Recently we have investigated practical synthetic routes to various carbasugar stereoisomers that can be used as building blocks for non-hydrolyzable oligosaccharide analogs. As a part of our attempts to develop practical synthetic routes to all 16(32) stereoisomers of carbasugars, we have synthesized enantiopure carba-β-altrose derivs. from 3-cyclohexene-1-carboxylic acid via enzymic resolution and stereoselective introduction of hydroxyl groups at C1.apprx.C4. Furthermore regio- and stereo-selective inversions of C1.apprx.C4 of carba-β-altrose were accomplished to give carba-β-mannose, carba-β-idose, carba-β-talose, carba-α-altrose, carba-β-allose, and carba-α-allose derivs.

L148 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:106238 HCAPLUS Full-text
DOCUMENT NUMBER: 140:321600
TITLE: Practical syntheses of enantiopure carbasugars: carba-β-altrose, carba-β-mannose,

carba-β-idose, and carba-β-talose derivatives
AUTHOR(S): **Yu, Seok-Ho; Chung, Sung-Kee**
CORPORATE SOURCE: Department of Chemistry, Division of Molecular and Life Sciences, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Tetrahedron: Asymmetry (2004), 15(4), 581-584
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:321600

doesn't teach polymers

AB D And L forms of carba-β-altrose, carba-β-mannose, carba-β-idose, carba-β-talose derivs. were prepared from (±)-3-cyclohexene-1-carboxylic acid. Homochiral diol compds., which were prepared from (±)-3-cyclohexene-1-carboxylic acid via enzyme resolution, were efficiently transformed to carba-β-altrose derivs. by stereoselective introduction of hydroxyl groups. Oxidation (PCC)/reduction (NaBH4) of 3-OH and/or 4-OH of efficiently gave carba-β-mannose, carba-β-idose and carba-β-talose derivs. with good stereoselectivity.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:316505 HCAPLUS Full-text
DOCUMENT NUMBER: 129:54509
TITLE: Syntheses of D-myo-inositol-1,2,6-trisphosphate and -2,6-bisphosphate
AUTHOR(S): **Chung, Sung-Kee; Yu, Seok-Ho;** Chang, Young-Tae

No polymers

CORPORATE SOURCE: Department of Chemistry, Pohang University of Science and Technology, Pohang, 790-784, S. Korea
SOURCE: Journal of Carbohydrate Chemistry (1998), 17(3), 385-390
CODEN: JCACDM; ISSN: 0732-8303
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 129:54509

Doesn't teach polym

AB A D-myo-inositol derivative, obtained from Me α-D-glucopyranoside by Ferrier rearrangement, was efficiently transformed to D-myo-inositol 1,2,6-trisphosphate (α-trinositol) and D-myo-inositol 2,6-bisphosphate.

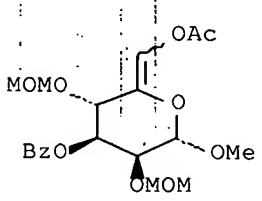
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L148 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:466512 HCAPLUS Full-text
DOCUMENT NUMBER: 125:168499
TITLE: Synthesis of L-chiro-inositol-1,2,3-trisphosphate and -1,2,3,5-tetrakisphosphate by Ferrier reaction of methyl α-D-mannopyranoside
AUTHOR(S): **Chung, Sung-Kee; Yu, Seok-Ho**

no polymers

CORPORATE SOURCE: Dep. of Chemistry, Pohang Univ. of Science & Technology, Pohang, 790-784, S. Korea
SOURCE: Bioorganic & Medicinal Chemistry Letters (1996), 6(13), 1461-1464
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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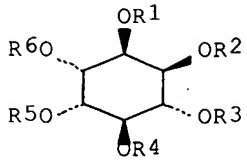
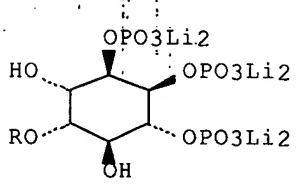


II

AB The Ferrier rearrangement of a Me α-D-mannopyranoside derivative I, followed by a stereoselective reduction gave a L-chiro-inositol derivative II (R1 = R3 = H, R2 = Ac, R4 = R6 = MOM, R5 = Bz) which was converted to L-chiro-inositol 1,2,3-trisphosphate II (R1-R3 = PO3H2, R4-R6 = H) and L-chiro-inositol 1,2,3,5-tetrakisphosphate II (R1-R3 = R5 = PO3H2, R4 = R6 = H). These compds. may be considered to be the C3-position stereoisomers of D-myo-inositol 1,2,6-triphosphate (α-trinositol) and D-myo-inositol 1,3,4,5-tetrakisphosphate, resp., and should be useful for the binding studies with their macromol. counterparts.

L148 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:394363 HCAPLUS Full-text
DOCUMENT NUMBER: 125:114995
TITLE: Ferrier reaction of methyl α-D-mannopyranoside: synthesis of L-chiro-inositol 1,2,3-trisphosphate and 1,2,3,5-tetrakisphosphate
AUTHOR(S): **Chung, Sung-Kee; Yu, Seok-Ho**
CORPORATE SOURCE: Dep. Chem., Pohang Univ. Sci. Technol., Pohang, 790-784, S. Korea
SOURCE: Korean Journal of Medicinal Chemistry (1996), 6(1), 35-46
CODEN: KJMCE7; ISSN: 1225-0058
PUBLISHER: Korean Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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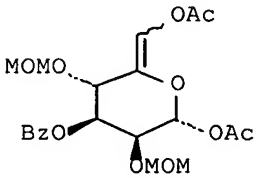

II

no polymers

AB L-Chiro-inositol phosphates I (R = H, PO3Li2) were prepared via Ferrier rearrangement of (Z)-mannopyranoside II followed by a stereoselective reduction Compds. I may be considered to be the C3-position stereoisomers of D-myo-inositol 1,2,6-trisphosphate (α-trinositol) and D-myo-inositol 1,3,4,5-tetrakisphosphate, resp., and should be useful for the binding studies with their receptors and metabolic enzymes.

L148 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:299011 HCAPLUS Full-text
DOCUMENT NUMBER: 122:187949
TITLE: Synthesis of D-6-deoxy-6,6-difluoro-myo-inositol
AUTHOR(S): **Chung, Sung-Kee; Yu, Seok-Ho**
CORPORATE SOURCE: Dep. Chem., Pohang Univ. Sci. Technology, Pohang, 790-784, S. Korea
SOURCE: Korean Journal of Medicinal Chemistry (1994), 4(2), 80-3
CODEN: KJMCE7; ISSN: 1225-0058
PUBLISHER: Korean Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 122:187949
AB The first synthesis of optically pure D-6-deoxy-6,6-difluoro-myo-inositol 9 was accomplished via 1-O-acetyl-2,3,4,5-tetra-O-benzyl-myo-D-inosose, the key intermediate which was prepared from Me α-D-glucopyranoside by Ferrier rearrangement.

no polymers

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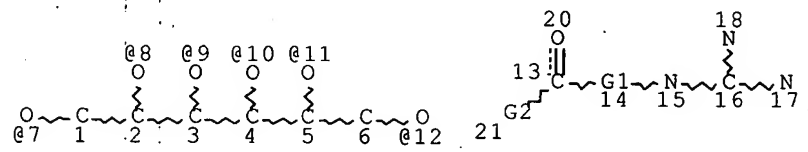
L149 STR



REP G1=(1-12) C
VAR G2=7/8/9/10/11/12
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE
L151 5 SEA FILE=REGISTRY SSS FUL L149
L152 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L151

=> d ibib abs hitstr l152 1-2

L152 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:1177686 HCAPLUS Full-text
DOCUMENT NUMBER: 147:474696
TITLE: Arginine prodrugs with high therapeutic activity
INVENTOR(S): Annunziato, Lucio; Secondo, Agnese; Minale, Massimiliano; Melisi, Daniela; Rimoli, Maria Grazia; Montoro, Paola; Piacente, Sonia; De Capraris, Paolo
PATENT ASSIGNEE(S): Farmaceutici Damor S.p.A., Italy; Universita' Degli Studi di Napoli "Federico Ii", Divisione di Farmacologia, Dipartimento di Neuroscienze
SOURCE: PCT Int. Appl., 24pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007115808	A1	20071018	WO 2007-EP3145	20070406

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

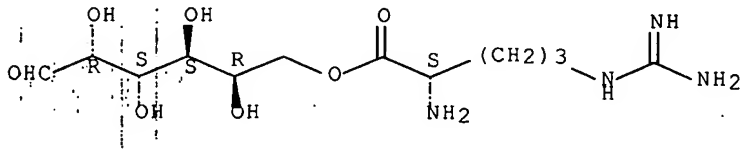
PRIORITY APPLN. INFO.: IT 2006-MI677 A 20060406

AB Esters of arginine (L- and/or D- enantiomers) with D-galactose useful as prodrugs are described, possessing a high capacity for penetrating cell membranes and the blood-brain barrier. The esters of the invention, once absorbed, gradually release arginine and ensure prolonged and high levels of the drug, generating a substantial and extended therapeutic response over time.

IT **952575-27-8P 952575-29-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(arginine prodrugs with high therapeutic activity)

RN 952575-27-8 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

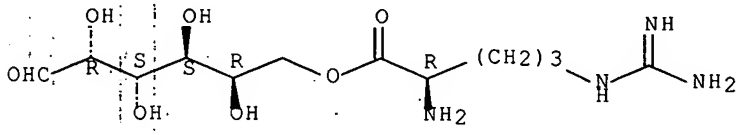
Absolute stereochemistry.



RN 952575-29-0 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

No reason to attach to another sugar ↳ the arg. pending is the pending & is rigid

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L152 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1155705 HCAPLUS Full-text
DOCUMENT NUMBER: 145:471812
TITLE: Preparation of glycoside, oligosaccharide and cyclitol molecular transporter analogs with high permeability through biological membranes
INVENTOR(S): Chung, Sung-Kee; Maiti, Kaustabh Kumar; Lee, Woo Sirl; Jeon, Ock-Youm; Yu, Seok-Ho
PATENT ASSIGNEE(S): Postech Foundation, S. Korea; Postech Academy-Industry Foundation
SOURCE: PCT Int. Appl., 74pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

too late

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006115312	A1	20061102	WO 2005-KR2040	20050629
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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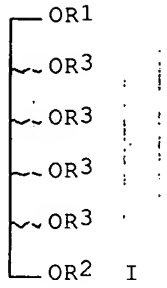
KR 2006112791	A	20061102	KR 2005-35410	20050428

PRIORITY APPLN. INFO.: KR 2005-35410 A 20050428
OTHER SOURCE(S): MARPAT 145:471812
GI



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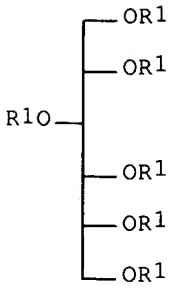


II

AB Title compds. I, wherein R1 and R2 are independently H, alkyl, arylalkyl, cycloalkyl, etc.; R3 is a ketoalkylamino guanidine analog are prepared as mol. transporter analogs with permeability for biol. active mols. Thus, II (R1 is -CO-(CH2)5NH-C=(NH)-NH2 hydrochloride salt) was prepared and tested for membrane permeability via fluorescent imaging (no data). In general, I displays good permeability when measured against an arginine nonamer for crossing biol. membrane such as a plasma membrane, nuclear membrane and blood-brain barrier.

IT **913834-21-6P**

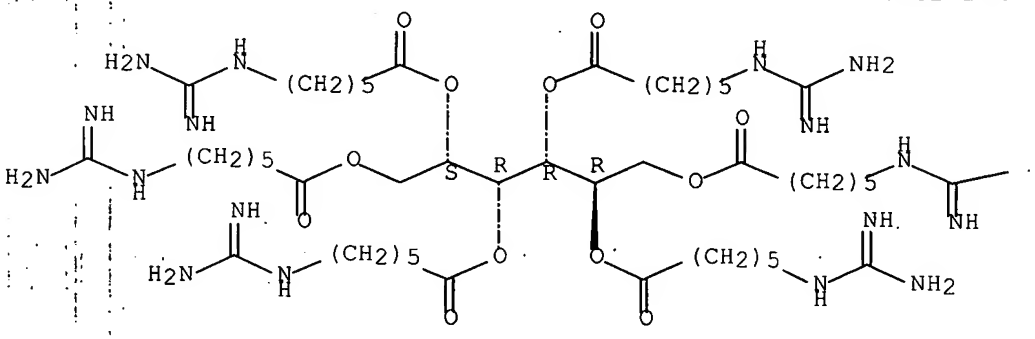
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of glycoside, oligosaccharide and cyclitol mol. transporter analogs with high permeability through biol. membranes)

RN 913834-21-6 HCAPLUS

CN D-Glucitol, 1,2,3,4,5,6-hexakis[6-[(aminoiminomethyl)amino]hexanoate], hydrochloride (1:6) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



●6 HCl

PAGE 1-B

IT **913834-20-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

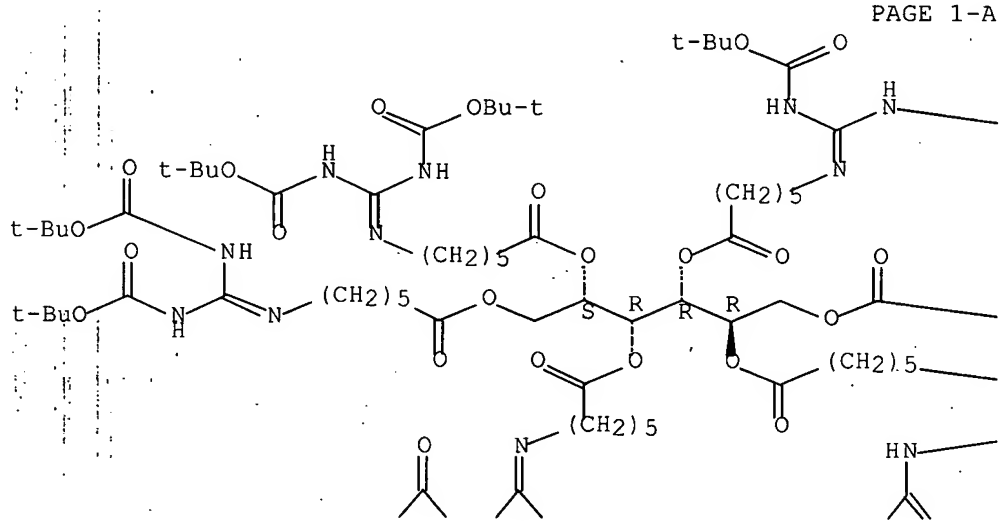
(preparation of glycoside, oligosaccharide and cyclitol mol. transporter analogs with high permeability through biol. membranes)

RN 913834-20-5 HCAPLUS

CN D-Glucitol, 1,2,3,4,5,6-hexakis[6-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]hexanoate] (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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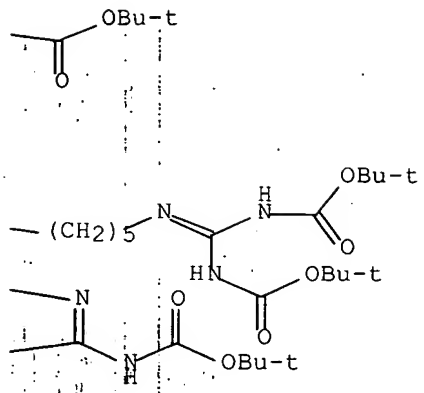

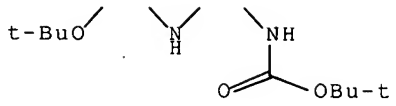

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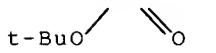

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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